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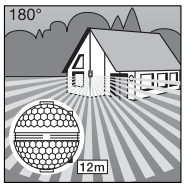
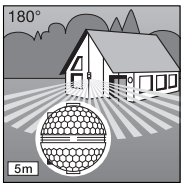
Information
IS 2180-2

Das Prinzip

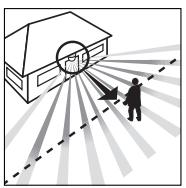
Der IS 2180-2 ist mit zwei 120°-Pyro-Sensoren ausgestattet, die die unsichtbare Wärmestrahlung von sich bewegenden Körpern (Menschen, Tieren etc.) erfassen. Diese so erfasste Wärmestrahlung wird elektronisch umgesetzt, und ein angeschlossener Verbraucher (z.B. eine Leuchte) wird eingeschaltet. Durch 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. 5 m oder 12 m. Mit den beiliegenden Wandhaltern lässt sich der Infrarot-Sensor problemlos an Innen- und Außenecken montieren.



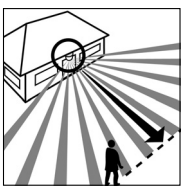
Reichweite max. 12 m



Reichweite max. 5 m



Gehrichtung: frontal

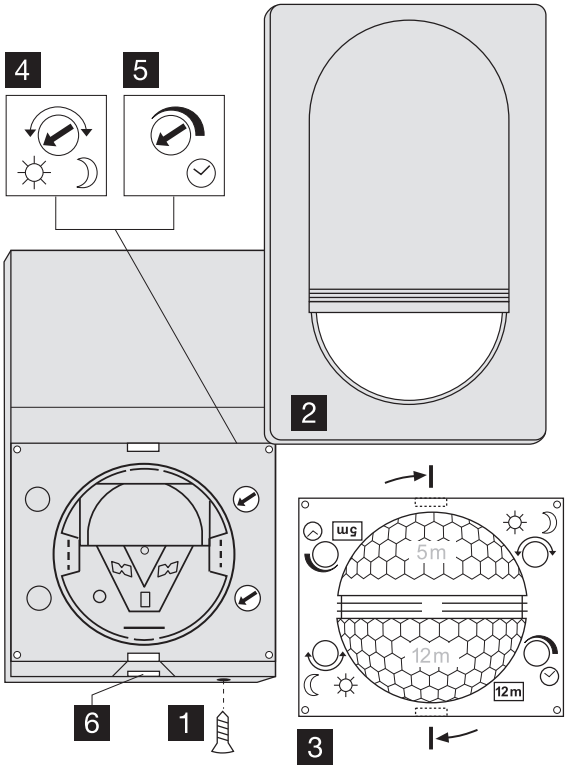


Gehrichtung: seitlich

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 handelsüblichen Installationsvorschriften und Anschluss-bedingungen durchgeführt werden (Ⓓ - VDE 0100, Ⓐ - ÖVE-EN 1, Ⓒⓗ - 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.



(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 Security screw
2 Front cover
3 Lens (can be removed and turned for selecting the max. basic reach settings of 5 m or 12 m)
4 Light threshold setting control 2 – 2000 lux
5 Time setting control 10 sec. – 15 min.
6 Clip (housing can be flipped up for assembly and connection to mains power supply)

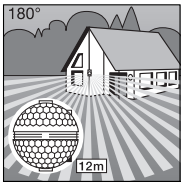
Technical specifications

Dimensions:	(H x W x D) 120 x 76 x 56 mm
Output:	
☼	Filament bulbs, 1000 W max., operating on 230 V AC
⊐	Fluorescent lamp, 500 W max., at cos φ = 0.5, inductive load at 230 V AC
⊐ ⊐	6 x 58 W each max., C ≤ 132 µF operating on 230 V AC *1)
Connection:	230 – 240 V, 50 Hz
Detection angle	180° horizontal, 90° vertical
Sensor reach:	basic setting 1: 5 m max. basic setting 2: 12 m max. (factory setting) + precision adjustment from 1 – 12 m by means of clip-on shrouds
Time setting:	10 sec. – 15 min. (factory setting: 10 sec.)
Light threshold:	2 – 2000 lux (factory setting: 2000 lux)
Enclosure:	IP 54

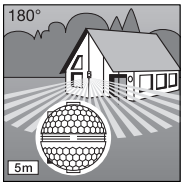
*1) Fluorescent lamps, low-energy bulbs, LED lights with electronic ballast (total capacity of all connected ballasts below the value specified).

Principle

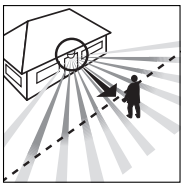
The IS 2180-2 is equipped with two 120° pyro sensors which detect the invisible heat emitted by moving objects (people, animals etc.). The heat detected is electronically converted into a signal that switches on loads (e.g. a light) connected to it. Heat is not detected through obstacles, such as walls or panes of glass. Heat radiation of this type will, therefore, not trigger the sensor. With a 90° angle of aperture, the two pyro sensors cover a detection angle of 180°. The lens can be removed and turned, thereby permitting two max. basic reach settings of 5 m or 12 m. Using the wall mounts provided with the unit, the infrared sensor can easily be fitted to internal and external corners.



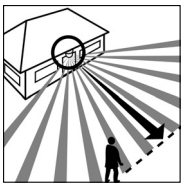
Reach max. 12 m



Reach max. 5 m



Direction of approach: towards the sensor



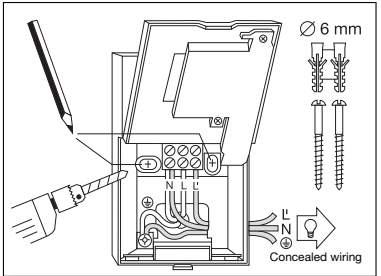
Direction of approach: across the detection zone

Important: The most reliable way of detecting motion is to install the unit so that the sensor is 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 warnings

- Disconnect the power before attempting any work on the motion detector.
- The electrical connection lead must be dead during installation. Therefore, switch off the power supply first and check that the circuit is disconnected using a voltage tester.
- Installation of the sensor involves work on the mains power supply. This work must therefore be carried out professionally in accordance with the applicable wiring regulations and supply conditions.
- 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 light threshold settings with the lens fitted.

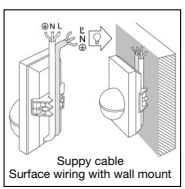
Installation/Wall mounting



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 5/12 m, the sensor should be installed at a height of approx. 2 m.

Installation procedure:
1. Detach front cover 2,
2. Release clip 6 and flip up lower half of housing,
3. Mark drill holes, **4.** Drill the holes, insert wall plugs (6 mm dia.), **5.** Break open cable entry for surface or concealed wiring.
6. Feed through mains supply and service cable and connect to terminals. Use sealing plugs for surface wiring.

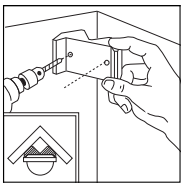
a) Connect mains supply lead
The mains supply leads is a 2 to 3-core cable:
L = phase conductor
N = neutral conductor
PE = protective-earth conductor (⏚)
If you are in any doubt, you must identify the cables using a voltage tester; once you have done so, disconnect the power supply again. Connect the phase (**L**) and neutral conductor (**N**) to the clamp-type terminal. Connect the protective earth conductor to the earth terminal (⏚).
A power ON/OFF switch may of course be installed in the power supply lead. Alternatively, you may use a normally closed contact pushbutton to activate the sensor manually for the duration of the time setting.

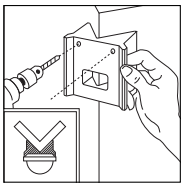


Note: The internal-corner wall mount may be used for mounting the sensor to the wall. The cables can be conveniently routed down the surface of the wall behind the unit and fed through the cable entry.

b) Connect service lead
The service supply lead to the light is also a 2 to 3-core cable. Connect the light's current-carrying conductor to the terminal marked **L'**. The service lead neutral conductor must be connected to the terminal marked **N** together with the mains lead neutral conductor.
Connect the protective-earth conductor to the earth contact (⏚).
7. Screw on housing and close again.
8. Fit lens (set reach to either 5 m or 12 m max), see 'Reach setting' section.
9. Select time 5 and light threshold setting 4 (see 'Functions' section).
10. Locate front cover 2 and fit security screw 1 to protect cover from unauthorised removal.
Important: Reversing the connections may result in damage to the unit.

Installation using corner wall mount



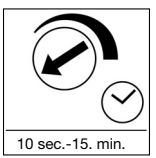


The corner wall mount enclosed with the unit provides a convenient means of installing the IS 2180-2 to internal and external corners. Use the corner wall holder as a template for drilling the hole. This way, you will drill the hole at the right angle, allowing you to fit the wall mount with ease.

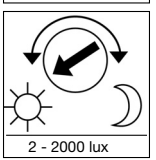
Functions

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 controls are concealed behind the front cover 2.

Important: Only carry out time and light threshold settings with the lens fitted.

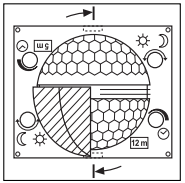


Switch-off delay (time setting)
The chosen light ON time can be varied continuously from approx. 10 sec. to a maximum of 15 min. Turning the adjustment screw fully anti-clockwise selects the shortest time of approx. 10 sec., turning the adjustment screw fully clockwise the longest time of approx. 15 min. The shortest time setting is recommended for setting the detection zone and performing the walk test.



Twilight setting (response threshold)
The chosen detector response threshold can be adjusted continuously from approx. 2 lux to 2000 lux. Turning the adjustment screw fully anti-clockwise selects daylight operation at approx. 2000 lux. Turning the adjustment screw fully clockwise selects twilight operation at approx. 2 lux. The adjustment screw must be turned fully anti-clockwise for setting the detection zone and performing the walk test in daylight.

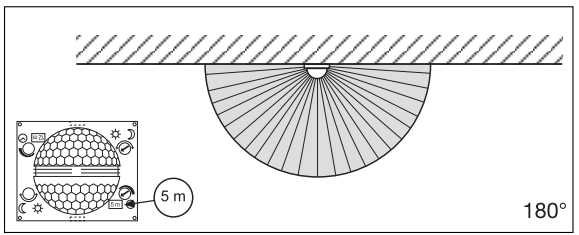
Basic reach settings

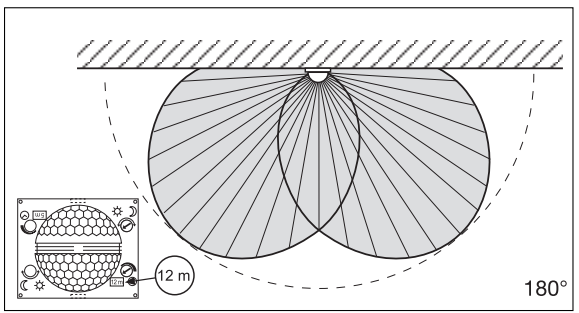


The lens of the IS 2180-2 is divided into two detection zones. One half covers a max. reach of 5 m, the other half a max. reach of 12 m (when installed at a height of approx. 2 m). After fitting the lens (press lens firmly into the channel provided) you will see the max. reach setting (12 m or 5 m) at the bottom right.

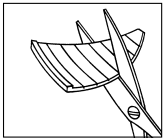
Using a screwdriver, the lens can be unclipped from the groove at the side and re-positioned for the reach you require.

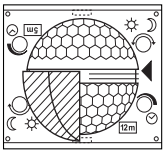
Examples





Precision adjustment using shrouds

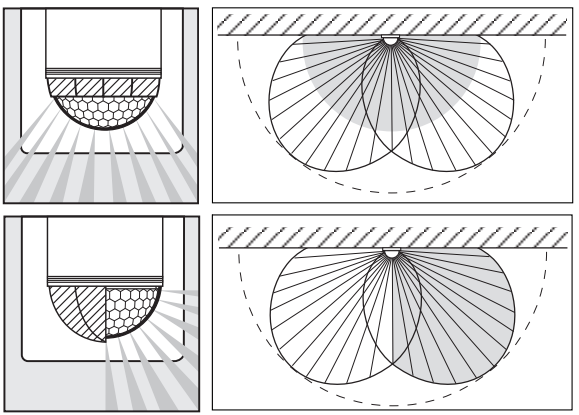




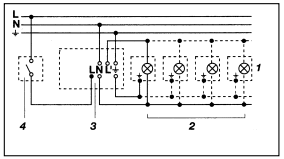
Shrouds may be used to define the detection zone exactly as you require in order, for example, to blank out or specifically target paths or neighbouring premises.
The shrouds can be divided or cut with a pair of scissors along the vertical and horizontal grooves. They can be clipped into the top channel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

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

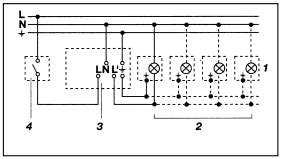
Examples



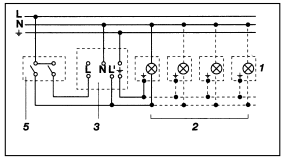
Wiring examples



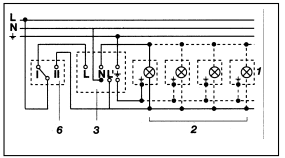
1. Light without neutral conductor



2. Light with neutral conductor



3. Connection using series switch for manual and automatic operation



4. Connection to double-throw switch for permanent light ON and automatic operation
Setting I: automatic operation
Setting II: manual operation for permanent light ON
Important: the unit cannot be switched off, but operated only at settings I and II.

1) e.g. 1-4 x 100 W filament bulbs
2) Service load, light of 1000 W max. (see Technical specifications)
3) IS 2180-2 connection terminals
4) Indoor switch
5) Indoor series switch, manual, automatic
6) Indoor double-throw switch, automatic, permanent light ON

Operation/Maintenance

The Infrared Sensor is suitable for switching light on and off automatically. The unit is not suitable for special burglary alarm systems since it lacks the tampering protection prescribed for this purpose.

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 2180-2 without power	■ Fuse faulty; not switched ON	■ Renew fuse, switch on mains power switch, check wiring with voltage tester
	■ Short circuit	■ Check connections
	■ Mains switch OFF	■ Switch on
IS 2180-2 will not switch ON	■ Twilight control set to nighttime mode during daytime operation	■ Adjust setting
	■ Bulb faulty	■ Change light bulb
	■ Mains power switch OFF	■ Switch on
	■ Fuse faulty	■ Renew fuse, check connection if necessary
	■ Detection zone not properly targeted	■ Re-adjust
IS 2180-2 will not switch OFF	■ Continuous movement in the detection zone	■ Check detection zone and re-adjust if necessary or fit shrouds
	■ Light is in detection zone and keeps switching on as a result of temperature change	■ Re-adjust zone or apply shroud
	■ Set to continuous operation by indoor series switch	■ Set series switch to automatic mode
IS 2180-2 keeps switching ON/OFF	■ Light is in detection zone	■ Adjust detection zone or fit shrouds, increase distance
	■ Animals moving in detection zone	■ Adjust detection zone or fit shrouds
	■ Heat source (e.g. extractor hood outlet) in detection zone	■ Adjust detection zone or fit shrouds
IS 2180-2 switches on when it should not	■ Wind is moving trees and bushes in the detection zone	■ Blank off sections using shrouds
	■ Cars in the street are being detected	■ Blank off sections using shrouds
	■ Sudden temperature changes due to weather (wind, rain, snow) or air expelled from fans or open windows	■ Adjust detection zone or change site of installation

CE Declaration of conformity

This product complies with
- Low Voltage Directive 2006/95/EC
- EMC Directive 2004/108/EC.

Declaration of Guarantee

All rights are based on our guarantee period. We guarantee that your STEINEL Professional sensor product will remain in perfect condition and proper working order for a period of 5 years. We guarantee that this product is free from material, manufacturing and design flaws. In addition, we guarantee that all electronic components and cables function in the proper manner and that all materials used and their surfaces are without defects.

Making Claims
If you wish to make a claim, please send your product complete and carriage paid with the original receipt of purchase, which must show the date of purchase and product designation, either to your retailer or directly to us at **STEINEL (UK) Limited, 25 Manasty Road, Axis Park, Orton Southgate, Peterborough, PE2 6UP**. For this reason, we recommend that you keep your receipt of purchase in a safe place until the guarantee period expires. STEINEL shall assume no liability for the costs or risks involved in returning a product.

For information on making claims under the terms of the guarantee, please go to www.steinel-professional.de/garantie

If you have a guarantee claim or would like to ask any question regarding your product, you are welcome to call us at any time on our **service hotline 01733 366700**.

FUNCTIONAL
5 Year
WARRANTY

CZ Montážní návod

Vážený zákazníku,

děkujeme Vám za důvěru, kterou jste nám projevil zakoupením tohoto 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. 5 m nebo 12 m)
4 Soumrakové nastavení 2 – 2000 lx
5 Časové nastavení 10 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. à 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. 5 m základní nastavení 2: max. 12 m (nastavení z výroby) + jemné doladění krycími miskami 1 – 12 m
Časové nastavení:	10 s – 15 min. (nastavení z výroby: 10 s)
Soumrakové nastavení:	2 – 2000 lx (nastavení z výroby: 2000 lx)
Krytí:	IP 54

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