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110058479 10/2018 Technische Änderungen vorbehalten. / Subject to technical modification without notice.

STEINEL® PROFESSIONAL

Information

iHF 3D

DE GB FR NL IT ES PT SE DK FI NO GR TR HU CZ SK PL RO SI HR EE LT LV RU BG CN

DE . . . . . 10 Textteil beachten!
GB . . . . . 15 Follow written instructions!
FR . . . . . 20 Se référer à la partie texte !
NL . . . . . 25 Let op de tekst!
IT . . . . . 30 Osservare il testo!
ES . . . . . 35 ¡Téngase en cuenta el texto!
PT . . . . . 40 Siga as instruções escritas!
SE . . . . . 45 Iaktta texten!
DK . . . . . 50 Følg den skriftlige vejledning!
FI . . . . . 55 Huomaa tekstiosio!
NO . . . . . 60 Se de skriftlige instruksene!
GR . . . . . 65 Τηρείτε γραπτές οδηγίες!
TR . . . . . 70 Metin kısmını dikkate alın!
HU . . . . . 75 Szöveges részre figyelni!
CZ . . . . . 80 Dodržujte informace v textové části!
SK . . . . . 85 Dodržiavajte informácie v textovej časti!
PL . . . . . 90 Postępować zgodnie z instrukcją!
RO . . . . . 95 Respectați instrucțiunile scrise!
SI . . . . . 100 Upoštevajte del besedila!
HR . . . . . 105 Pridržavajte se pisanih uputa!
EE . . . . . 110 Järgige tekstiosa!
LT . . . . . 115 Laikykitės rašytinių instrukcijų!
LV . . . . . 120 Pievērsiet uzmanību tekstam!
RU . . . . . 125 Обратите внимание на текстовую часть!
BG . . . . . 130 Да се вземе предвид текстовата част!
CN . . . . . 135 注意正文 !

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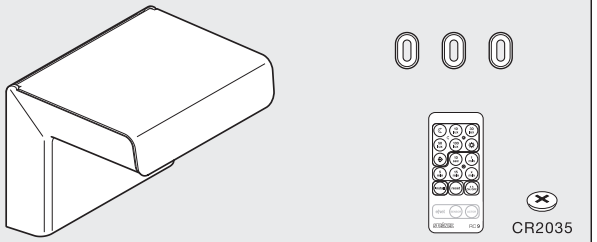

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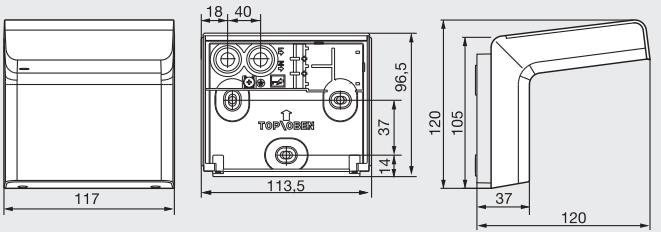

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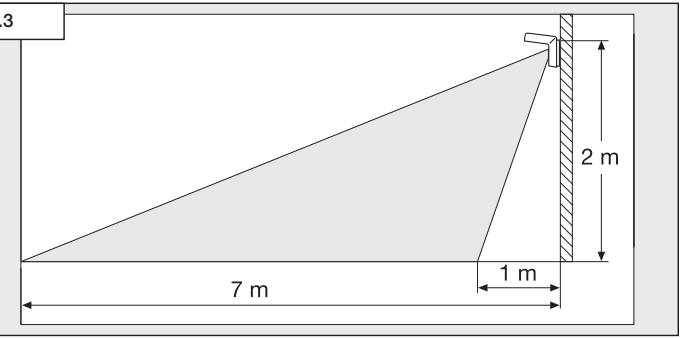

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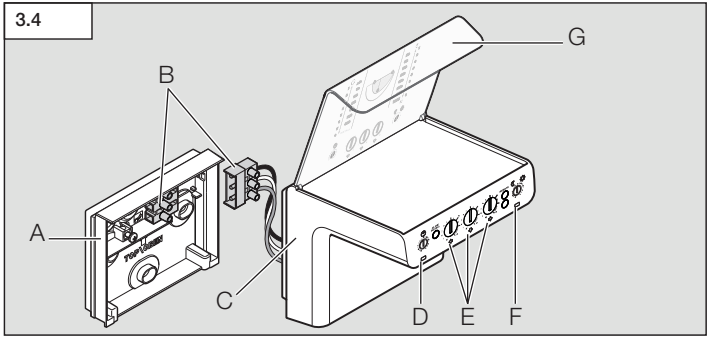

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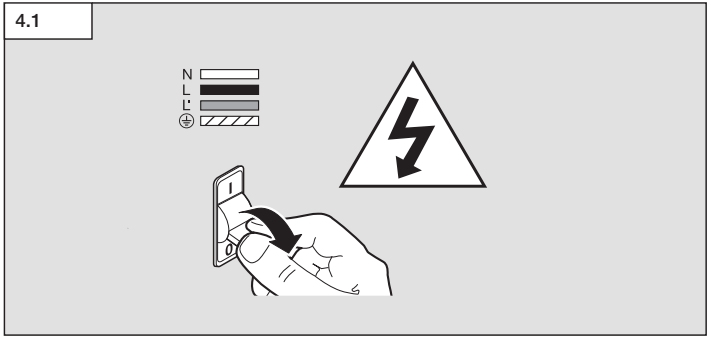

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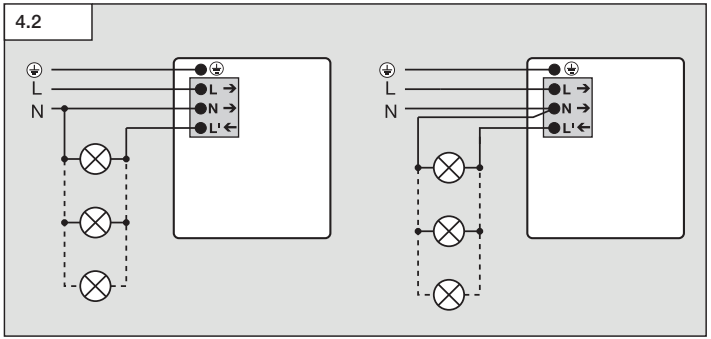

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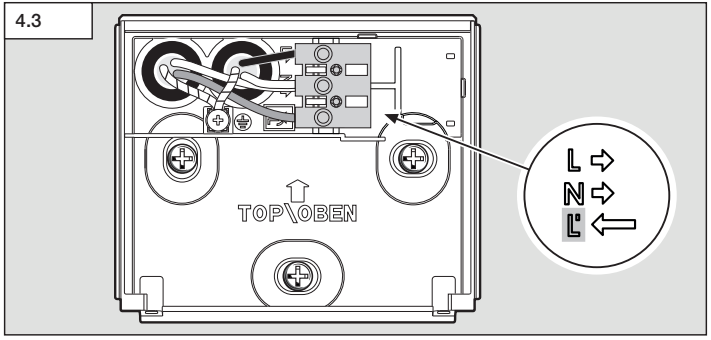

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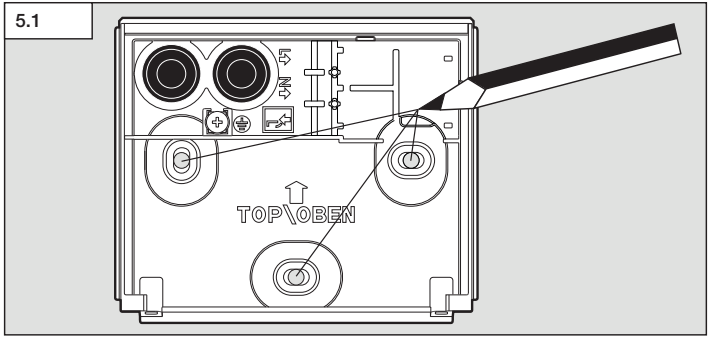

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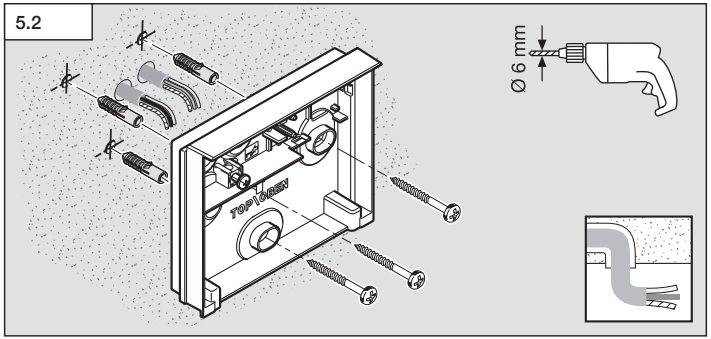

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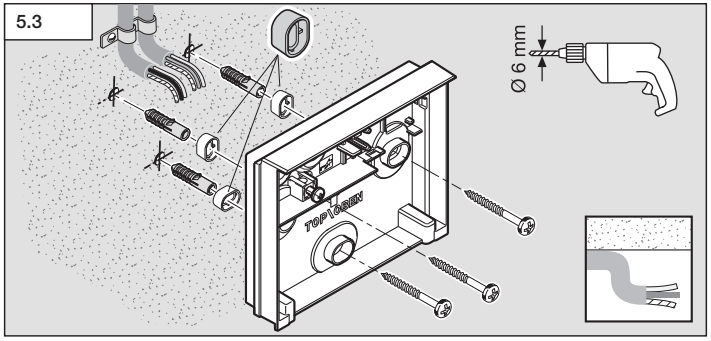
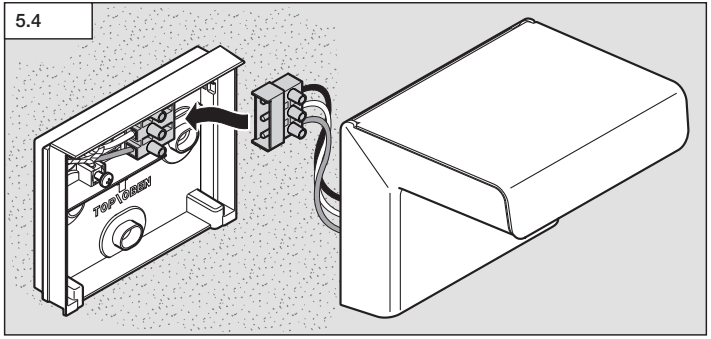

Ø 6 mm
TOP LOBBY

5.4


TOP LOBBY

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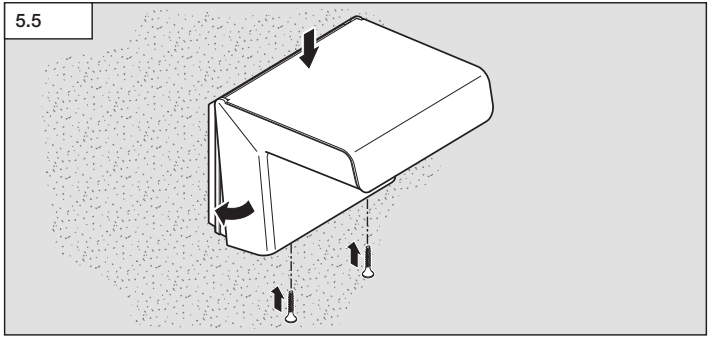

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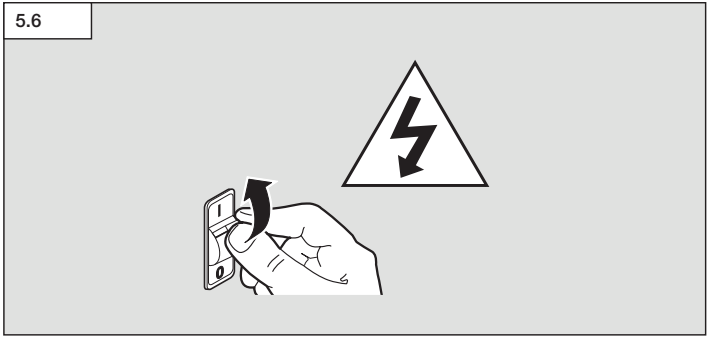

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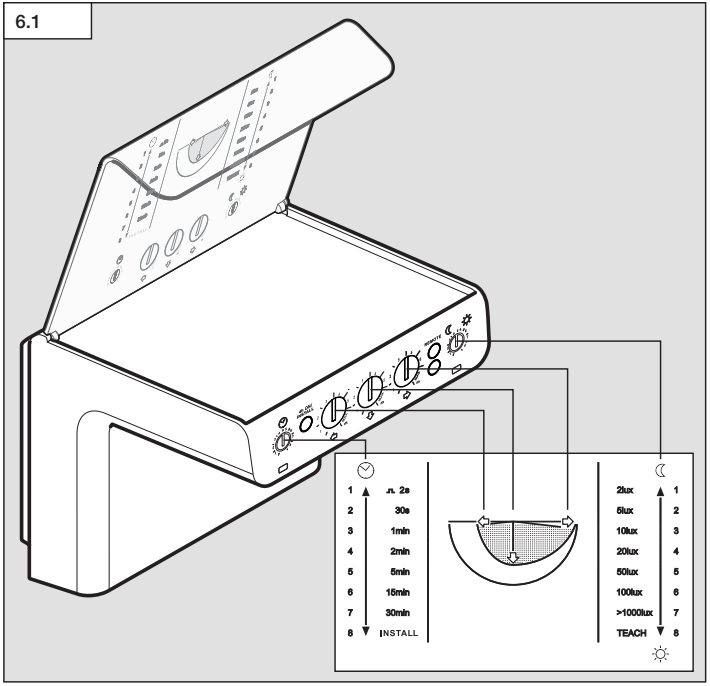
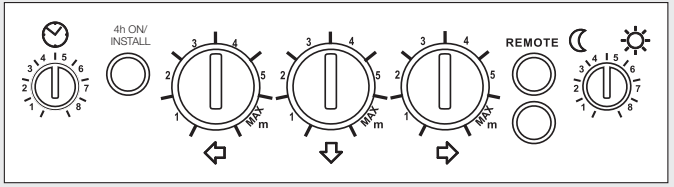
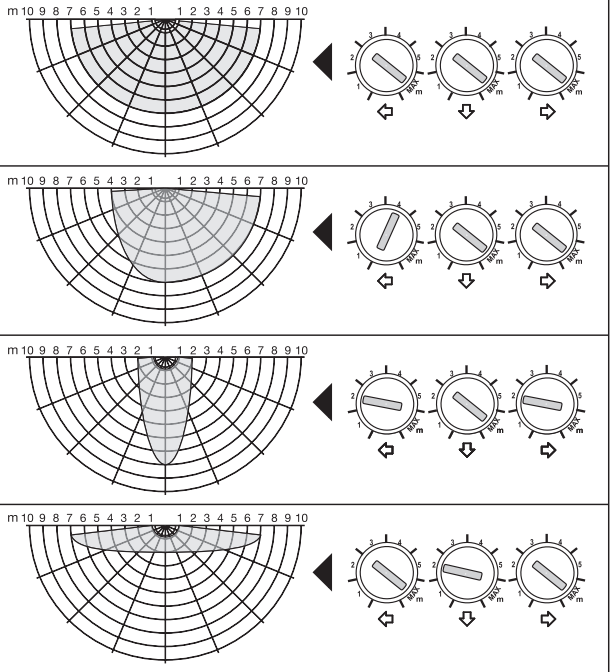

1 2s
2 30s
3 1min
4 2min
5 5min
6 15min
7 30min
8 INSTALL
2lux 1
5lux 2
10lux 3
20lux 4
50lux 5
100lux 6
>1000lux 7
TEACH 8

6.2



(H) (I-1) (I-2) (I-3) (J)

6.3



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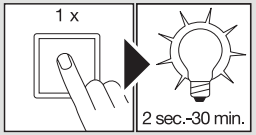

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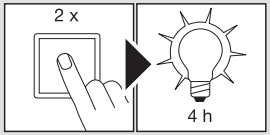

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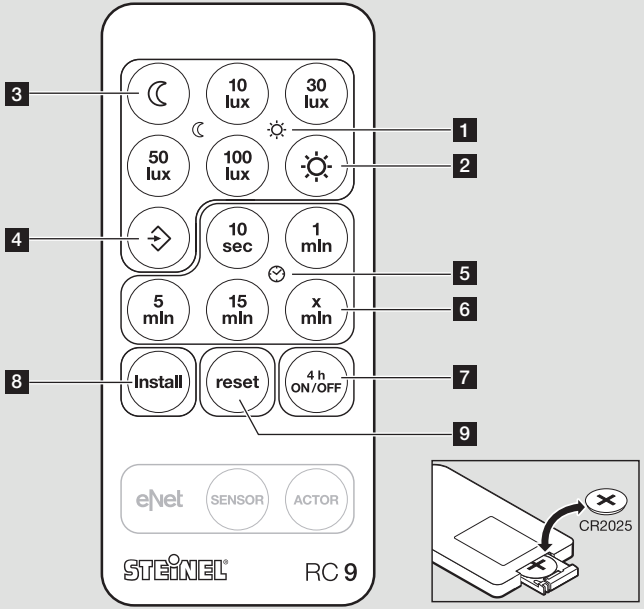

11. Technische Daten

Abmessungen (H × B × T)	120 × 117 × 120 mm
Netzanschluss	120-250 V, 50/60 Hz
Leistung	
	Glühlampen, max. 2000 W bei 230 V *1)
	Leuchtstoffröhre, max. 1000 VA bei 230 V (cos φ = 0,5)
Einschaltstrom	max. 800A / 200 µs
	EVG *2) max. 8 × à 58 W, C ≤ 176 µF, Gesamtkapazität: 230 VAC
Erfassungswinkel	160°
Sensorik	5,8 GHz, 1 mW
Reichweite	1-5 m (max. ca. 7 m)
Zeiteinstellung	30 s - 30 min, 10 s - 30 min (durch FB RC9)
Dauerlicht	schaltbar (4 h)
Dämmerungseinstellung	2-2000 Lux
Max. Flächenabdeckung	ca. 68 m^2
Schutzart	IP 54
Temperaturbereich	-20 bis +50 °C

*1) VDE-geprüft
*2) Leuchtstofflampen, Energiesparlampen, LED-Leuchten mit elektronischem Vorschaltgerät (Gesamtkapazität aller angeschlossenen Vorschaltgeräte unter dem angegebenen Wert).

12. Betriebsstörungen

Störung	Ursache	Abhilfe
Sensor ohne Spannung	■ Sicherung hat ausgelöst, nicht eingeschaltet, Leitung unterbrochen	■ Sicherung einschalten, tauschen, Netzschalter einschalten, Leitung mit Spannungsprüfer überprüfen
	■ Kurzschluss	■ Anschlüsse überprüfen
Sensor schaltet nicht ein	■ bei Tagesbetrieb, Dämmerungseinstellung steht aufNachtbetrieb	■ neu einstellen
	■ Glühlampe defekt	■ Glühlampe austauschen
	■ Netzschalter AUS	■ einschalten
	■ Sicherung hat ausgelöst	■ Sicherung einschalten, tauschen, evtl. Anschluss überprüfen
	■ Erfassungsbereich nicht gezielt eingestellt	■ neu justieren
Sensor schaltet nicht aus	■ dauernde Bewegung im Erfassungsbereich	■ Bereich kontrollieren und evtl. neu justieren bzw. abdecken
		■ Bereich ändern bzw. abdecken
		■ Dauerlichtbetrieb 4 h deaktivieren
Sensor schaltet immer EIN/AUS	■ geschaltete Leuchte befindet sich im Erfassungsbereich	■ Bereich umstellen bzw. abdecken, Abstand vergrößern

GB

1. About this document

Please read carefully and keep in a safe place.
– Under copyright. Reproduction either in whole or in part only with our consent.
– Subject to change in the interest of technical progress.

Symbols

Hazard warning!

Reference to other information in the document.

2. General Safety Notification

Disconnect the power supply before attempting any work on the unit.

- During installation, the electric power cable to be 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 national wiring regulations and electrical operating conditions. (**DE** - VDE 0100, **AT** - ÖVE / ÖNORM E8001-1, **CH**- SEV 1000)
- Only use genuine replacement parts.
- Repairs may only be made by specialist workshops.

3. iHF 3D

Proper use
– The iHF 3D sensor is an active motion detector for wall mounting outdoors.

The iHF 3D sensor emits high-frequency electromagnetic waves (5.8 GHz) and receives their echo. Any movement by persons in the detection zone is noticed by the sensor as a change in echo and triggers a switching signal. Analysing the signal, the iHF 3D sensor distinguishes between moving persons and moving objects, such as bushes or small animals (animals up to the size of a cat). The 3D antenna system permits precision adjustment in any way in three directions. This rules out any inadvertent triggering by small animals as well as interference from extreme temperatures. All function settings can also be made via the RC9 remote control. **(→ "7. Accessories")**

Note: The high-frequency output of the iHF-sensor is approx.1 mW – that's 1000 times less than the transmission power of a mobile phone or the output of a microwave oven.

Package contents **(Fig. 3.1)**
Product dimensions **(Fig. 3.2)**
Mounting height / reach **(Fig. 3.3)**
Product components **(Fig. 3.4)**
A Wall mount
B Plug connection
C Sensor unit
D Time setting
E 3D reach setting
F Light-level setting
G Designer cover panel

4. Installation

- Switch OFF power supply **(Fig. 4.1)**

Wiring diagram **(Fig. 4.2)**

Connect the mains power supply lead **(Fig. 4.3)**
The mains supply lead is a 3-core cable (max. lead diameter 19 mm):
L = phase conductor (usually black, brown or grey)
N = neutral conductor (usually blue)
L' = live conductor (usually black or brown)

If you are in any doubt, identify the conductors using a voltage tester; then disconnect from the power supply again. Connect phase **(L)** and neutral conductor **(N)** to the terminal block.

Please note that the electric circuit must be protected by a 16A circuit breaker.

Important: Incorrectly wired connections will produce a short circuit later on in the product or your fuse box. In this case, you must identify the individual conductors once again and re-connect them. A mains power switch for

turning the unit ON and OFF may of course be installed in the mains supply lead.

5. Mounting

- Check all components for damage.
- Do not use the product if it is damaged.

Mounting procedure
- Select appropriate site of installation, giving consideration to sensor reach and detection of movements **(Fig. 3.3)**
- Switch OFF power supply **(Fig. 4.1)**
- Mark drill holes **(Fig. 5.1)**
- Drill holes and insert wall plugs **(Fig. 5.2)**
  – Concealed power supply lead **(Fig. 5.2)**
  – Surface-mounted power supply lead **(Fig. 5.3)**
- Connect conductors **(Fig. 4.2)**
- Make plug connection **(B) (Fig. 5.4)**
- Screw sensor unit **(C)** into place **(Fig. 5.5)**
- Switch ON power supply **(Fig. 5.6)**
- Make settings ➔ **"6. Operation"**

6. Operation

Operation/function legend **(Fig. 6.1)**

Note: After connecting to the mains power supply, the white Status-LED flashes for 10 s. The sensor is then ready for operation.

Factory settings
Time setting: Install (pos. 8)
Reach setting: 3x MAX
Light-level setting 1000 lux (pos. 7)

Functions
Time setting (Fig. 6.2 / H)
The time you wish the connected load to stay ON for can be adjusted to any of six settings: 30 seconds, 1 minute, 2 minutes, 5 minutes, 15 minutes to 30 minutes.

Pulse mode (Fig. 6.2 / H)
If you set the control dial to ⎍ **(pos. 1)**, the unit is in pulse mode, i.e. the output is switched ON for approx. 2 sec. (e.g. for staircase lighting timer). Afterwards, the sensor does not react to movement for approx. 8 s.

Install mode (Fig. 6.2 / H)
Install mode has the purpose of checking for proper working order as well for testing the detection zone. Irrespective of light level, the light connected switches ON for 10 s in response to movement (Status-LED flashes). Install mode has priority over all other settings. Change control dial setting to quit Install mode. When making settings with the RC9 remote control, Install mode ends automatically after 10 min.

Reach setting (Fig. 6.2 / I 1-3)
Reach can be infinitely adjusted in three directions via three control dials from 1-5 m (max. approx. 7 m) independently of each other. The maximum detection reach is selected via the control dials.
Detection diagram **(Fig. 6.3)**

Note: if the distance to a wall or similar structure is less than 7 m in any of these directions, the reach in that direction must still be set to maximum reach or detection errors may be made. The reach settings should only be used to mask out areas in which you do not want movement to result in light being switched ON. Performance of the iHF 3D may also be impaired by installing it in corners or on metal building exteriors.

Light-level setting
(Response threshold) (Fig. 6.2 / J)
The sensor's chosen response threshold can be infinitely varied from approximately 2 to 1000 lux.

Teach mode
Teach mode **(Fig. 6.2 / J / pos. 8)** saves the current ambient light level below which you do not want the sensor to respond to movement from now on.

Manual override function (Fig. 6.4 / 6.5)
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:

Sensor mode: (Fig. 6.4)
– Switch light ON (when light is OFF):
– Switch OFF and ON once. Light stays ON for the period selected.
– Switch light OFF (when light is ON):
– Switch OFF and ON once. Light goes out or switches to sensor mode.

Manual override (Fig. 6.5)
– **Activate manual override:**
– Turn switch OFF and ON twice. The light is set to manual override for 4 hours (Status-LED ON). Then it returns automatically to sensor mode (Status-LED OFF).
– **Deactivate manual override:**
– Switch OFF and ON once. Light goes out or switches to sensor mode.

Important: The switch must be actuated in rapid succession (in the 0.2 - 1 s range).

7. Accessories

Remote control RC9 (EAN 4007841007638)
Any number of iHF 3D sensors can be controlled by the RC9 remote control. The Status-LED on the sensor flashes (once) to indicate each valid press of the button. The Status-LED flashes (twice) to indicate each valid press of the button. **(Fig. 7.1)**

Functions:

Light-level setting
1 The chosen response threshold can be set from approx. 2-1000 lux.

2 **Daylight operation**

3 **Night-time operation**

4 **Teach mode**
This button must be pressed at the level of light at which you want the sensor to respond to movement from now on.
The current value is stored.

5 **Time setting**
The period of time you want the light to stay ON for after the last detected movement can be set to 10 s, 1 min, 5 min, 15 min by pressing these buttons.

6 **Light ON time**
Setting the light to stay ON for a time of your own choice. Each press of the button increments the current time setting by 1 min (up to 30 min).

7 **Manual override function**
Pressing this button switches the light ON for 4 hours (Status-LED on). The light then returns to sensor mode automatically. Pressing the button for a second time (before the 4 h period expires) returns the light to sensor mode.

8 **Install mode**
Install mode has the purpose of checking for proper working order as well for testing the detection zone. Irrespective of light level, the light switches ON for 10 s in response to movement. (Status-LED flashes).
Install mode has priority over all other settings. Install mode ends automatically after 10 min. Install mode ends immediately after pressing reset.
Note: Teach mode and Install mode cannot be used at one at the same time.

9 **Reset**
Resets all settings to the values selected on the light manually or to the factory settings.

Smart Remote (optional)
(EAN 4007841009151)
– Control by smartphone or tablet
– Replaces remote control
– Load appropriate app and connect via Bluetooth

8. EC Declaration of Conformity

STEINEL Vertrieb GmbH hereby declares that the iHF 3D conforms to Directive 2014/53/EU. The full wording of the EU Declaration of Conformity is available for downloading from the following Internet address:
http://www.steinel.de http://www.steinel.de

GB

9. Disposal

Electrical and electronic equipment, accessories and packaging must be recycled in an environmentally compatible manner.

Do not dispose of electrical and electronic equipment as domestic waste.

For EU countries only: under the current European Directive on Waste Electrical and Electronic Equipment and its transposition in national law, electrical and electronic equipment no longer suitable for use must be collected separately and recycled in an environmentally compatible manner.

10. Warranty

As purchaser, you are entitled to your statutory rights against the vendor. If these rights exist in your country, they are neither curtailed nor restricted by our Warranty Declaration. 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 contact us at **STEINEL (UK) Limited, 25 Manasty Road, Axis Park, Orton Southgate, Peterborough, PE2 6UP**, for a returns number. For this reason, we recommend that you keep your receipt of purchase in a safe place until the warranty 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 warranty, please go to **www.steinel-professional.de/garantie**

If you have a warranty 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**.

5 YEAR MANUFACTURER'S WARRANTY

GB

11. Technical Specifications

Dimensions (H × W × D)	120 × 117 × 120 mm
Mains voltage	120-250 V, 50 / 60 Hz
Output	
	Bulbs, 2000 W max. at 230 V *1)
	Fluorescent tube, 1000 VA max. at 230 V (cos φ = 0.5)
Starting current	max. 800 A / 200 µs
	Electronic ballast *2): 8 × 58 W max., C ≤ 176 µF, Total capacity: 230 VAC
Angle of coverage	160°
Sensor system	5.8 GHz, 1 mW
Reach	1-5 m (approx. 7 m max.)
Time setting	30 s - 30 min, 10 s - 30 min (by remote control RC9)
Manual override	selectable (4h)
Twilight setting	2 - 2000 lux
Max. area covered	approx. 68 m^2
IP rating	IP 54
Temperature range	-20° to +50°C

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

12. Troubleshooting

Malfunction	Cause	Remedy
No power at the sensor	■ Fuse has tripped, not switched ON, break in wiring ■ Short circuit	■ Activate, change fuse, turn ON power switch, check wiring with voltage tester ■ Check connections
Sensor will not switch ON	■ Twilight setting in night mode during daytime operation ■ Bulb faulty ■ Mains power switch OFF ■ Fuse has tripped ■ Detection zone not properly targeted	■ Adjust setting ■ Change bulb ■ Switch ON ■ Activate, change fuse, check connection if necessary ■ Readjust
Sensor will not switch OFF	■ Continuous movement in the detection zone	■ Check zone, adjust or fit shrouds if necessary ■ Change zone, or fit shrouds ■ Deactivate 4 h manual override
Sensor keeps switching ON/OFF	■ Light being operated is located in detection zone	■ Change zone or fit shrouds, increase distance