

Art. 19030

GB Operator's Manual
smart Sensor

GARDENA smart Sensor

Translation of the original instructions.

Please read these operating instructions carefully and observe the notes given. Use these instructions to familiarise yourself with the unit and its proper use as well as the notes on safety.



For safety reasons, children and young people under 16 as well as anyone who is not familiar with these operating instructions should not use the unit. Persons with reduced physical or mental abilities may use the unit only if they are supervised or instructed by a responsible person. Children must be supervised to ensure that they do not play with the unit. Never operate the unit when you are tired, ill or under the influence of alcohol, drugs or medicine.

Intended use:

The GARDENA smart sensor is designed exclusively for private use outdoors in home gardens, on allotments and in greenhouses. It controls the smart system by measuring soil moisture, light intensity and temperature.

The smart Sensor can only be used together with the GARDENA smart Gateway Art. 19000.

The GARDENA smart Sensor must not be used for industrial purposes or in conjunction with chemicals, foodstuffs, easily flammable and explosive materials.

Table of Contents:

1. SAFETY	2
2. FUNCTION	3
3. INITIAL OPERATION	3
4. OPERATION	5
5. MAINTENANCE	5
6. STORAGE	6
7. TROUBLESHOOTING	6
8. TECHNICAL DATA	6
9. ACCESSORIES	6
10. SERVICE/WARRANTY	7
11. PRODUCT LIABILITY	7

1. SAFETY

Warning! Keep toddlers away when you assemble the unit.

Small parts can be easily swallowed. There is also a risk that the polybag can suffocate toddlers.

Warning! This unit makes an electromagnetic field while it operates. This field may under some conditions interfere with active or passive medical implants. To decrease the risk of conditions that can possibly injure or kill, we recommend persons with medical implants to speak with their physician and the medical implant manufacturer before operating.

The unit can be used in the temperature range $-1\text{ }^{\circ}\text{C}$ – $+50\text{ }^{\circ}\text{C}$ outdoors.

Batteries:

To ensure the Sensor runs safely, only 2 x alkaline manganese (alkaline) batteries type LR6 (AA) (Mignon) must be used for the authorized temperature range $-1\text{ }^{\circ}\text{C}$ – $+50\text{ }^{\circ}\text{C}$.



DANGER!

There is a risk of explosion if batteries are not replaced in the proper manner. See 6. STORAGE for information on how to dispose of used batteries.

Do not use re-chargeable batteries.

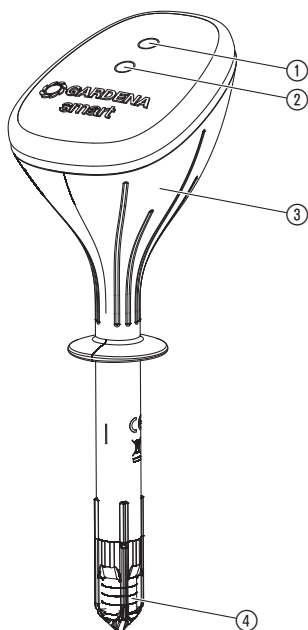
To prevent failure of the Sensor due to weak batteries in conjunction with a lengthy absence, batteries should be replaced in due course.

This will depend on the previous operating life of the batteries and the probable length of absence, which should not exceed 6 month in total.

2. FUNCTION

The Sensor measures the soil moisture at the root level of the plants, the lightness and the temperature automatically and sends the measured results to the Gateway. (The values can be read using the GARDENA smart system app).

Display/Sensors:



- ① **Light sensor**
- ② **Connection-LED:**
Green flashing: While connection
Green for 20 sec: Signal strength high
Yellow for 20 sec: Signal strength medium
Red for 20 sec: Signal strength low
- ③ **Temperature sensor** (inside the unit)
- ④ **Moisture sensor**

3. INITIAL OPERATION

To insert batteries:

The batteries are not included in the scope of delivery.

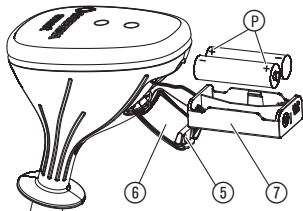
The Sensor must only be operated with 2 x alkalimanganese (alkaline) batteries type LR6 (AA) (Mignon).

The operating period is approx. 6 months. The operating period can vary depending on ambient temperature and transmission frequency.



CAUTION!

Rechargeable batteries should not be used!



1. Push the flap (5) and open the lid (6).
2. Remove the battery holder (7).
3. Insert the batteries into the battery holder (7).
When doing so, ensure correct polarity (P).
4. Insert battery holder (7) in the sensor.
5. Close the lid (6).

To select correct location:

Correct location:

The Sensor must be positioned at a location in the watering area which is exposed to the same climatic conditions as the plants (sun, wind, rain, etc.) for which a status is to be displayed.

Incorrect location:

The Sensor should not be covered by neighbouring plants. Areas of shade should be avoided.

To rule out erroneous reaction results caused by waterlogging, the Sensor should not be positioned in dips in the ground.

The sensor should not be positioned in places, where lawnmowers mow.

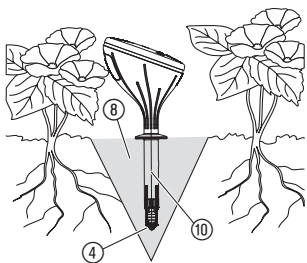
In direct sunlight, it should be noted that the measured ambient temperature can differ from the actual temperature.

To plant the Sensor :



WARNING!

The tip of the sensor will only measure the soil moisture correctly if the sensor tip is in full contact with the ground on all sides! No air should be trapped at the sensor tip in the ground.



1. Dig a funnel-shaped hole in the ground (8) at least 12 cm deep.
2. Break up the soil (9) removed and take out any stones.
3. If the soil is dry, moisten.
4. Replace the damp broken-up soil (8) in the funnel-shaped hole without packing tight.
5. Immerse entire sensor tip (4) in water (felt must be wet).
6. Insert the Sensor to the upper edge of the sensor (10) in the broken-up soil (8).
Here the sensor tip (4) must be in full contact with the damp soil on all sides.
7. Press down the soil (8) around the sensor (10) lightly.
The Sensor should not stand loose in the ground.
8. Water the area around the Sensor with approx. 1 litre water.
Depending on the ground it may take several hours until the Sensor measures the actual soil moisture.

HINT: To Connect GARDENA Micro-Drip-System:

To ensure that the quantity of water delivered is registered by the sensor tip when using the GARDENA Micro-Drip-System, a drip head should be installed directly above the sensor.

4. OPERATION

Operation with the GARDENA smart system App:

You can use the GARDENA smart system app to control all smart system devices from anywhere at any time. You can download the free GARDENA smart system app from the Apple App Store or from the Google Play Store.

In order to include, a smart gateway with internet connectivity is needed. All GARDENA smart devices are integrated via the app. Follow the instructions inside the App.

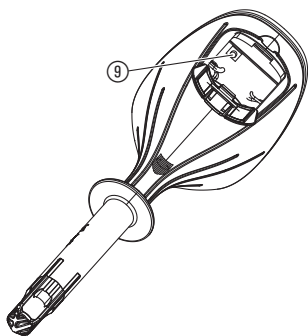
Displays of the sensor:

- Soil moisture (0 – 100%)
- Light intensity (0 – 200,000 Lux)
- Temperature (-1 – +50 °C)
- Battery status

Factory Reset:

The smart Sensor will be reset to the factory settings.

→ **Press and hold down the Reset key ⑨ for at least ten seconds.**



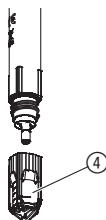
Usages:

To keep the soil moisture level as constant as possible, irrigation should be carried out with short watering cycles and short watering times. This especially applies to flower boxes on balconies, which have a watering time of < 5 min.

The spread of moisture in the soil after watering or rainfall is rather slow. In the worst-case scenario it may happen that irrigation and a rain shower overlap until the required soil moisture is attained.

5. MAINTENANCE

To clean/replace the sensor tip:



To clean the sensor:

Whenever the Sensor is relocated, the sensor tip should be cleaned/replaced. The felt on the tip should not come into contact with grease/oil.

→ Clean sensor tip ④ with clear water.

If the felt becomes damaged, the sensor tip can be re-ordered from GARDENA Service.

→ Unscrew sensor tip ④ and screw on new tip.

No caustic/abrasive cleaning agents should be used.

→ **Clean the sensor with a damp cloth (do not use solvent).**

6. STORAGE

To put into storage:

The unit must be stowed away from children.

1. To preserve the batteries, these should be removed (see 3. INITIAL OPERATION).
2. Stow the Sensor in a dry area where it has protection from frost.

Disposal:

(in accordance with
RL2012/19/EC):



The unit must not be added to usual household waste. Refer to local environmental laws for discarding.

→ Important: Make sure that the unit is discarded through your municipal recycling collection centre.

Disposing of flat batteries:

Please return flat batteries to a GARDENA dealer or dispose of them properly at your nearest recycling centre.

Only dispose of batteries when they are flat.

7. TROUBLESHOOTING



For any other malfunctions please contact the GARDENA service department. Repairs must only be done by GARDENA service departments or specialist dealers approved by GARDENA.

8. TECHNICAL DATA

smart Sensor (Art. 19030-20)

Operation temperature range (outdoors) -1 °C – 50 °C

SRD:

Frequency range 863 – 870 MHz

Maximum power 25 mW

Free field radio range approx. 100 m

Soil moisture 0 – 100 %

Light intensity 0 – 200,000 Lux

Batteries required 2 x alkalimanganese (alkaline) batteries type LR6 (AA) (Mignon)

Operating time of the batteries approx. 6 months with alkaline batteries (min. 2000 mAh)

CE Declaration:

The complete Declaration of Conformity can be found at:

www.gardena.com/CE-declarations

9. ACCESSORIES

GARDENA sensor tip with felt

For replacement if sensor tip is damaged.

Art. 19030-00.620.00
(from GARDENA Service)

10. SERVICE/WARRANTY

Service:

Please contact the address on the back page.

Guarantee:

GARDENA Manufacturing GmbH guarantees this unit for 2 years (from date of purchase). This guarantee includes all important defects of the unit that can be proved to be material or manufacturing faults. Under warranty we will replace the unit or repair it for no cost if these conditions are applicable:

- The unit must have been used properly and in keeping with the requirements of the operation instructions.
- Neither the purchaser or a not approved third party have tried to repair the unit.
- As a wear part the sensor tip with felt is not covered by the guarantee.
- Faults which occur as a result of incorrectly installed or leaking batteries are not covered by the guarantee.

This manufacturer's guarantee does not have an effect on the user's existing warranty claims against the dealer/seller.

If you have problems with this unit, please contact our Service.

11. PRODUCT LIABILITY

We expressly point out that, in accordance with the product liability law, we are not liable for any damage caused by our units if it is because of improper repair or if parts replaced are not original GARDENA parts or approved parts, and, if the repairs were not done by a GARDENA Service Centre or an approved specialist.

The same applies to spare parts and accessories.

Deutschland / Germany

GARDENA
Manufacturing GmbH
Central Service
Hans-Lorenser-Straße 40
D-89079 Ulm
Produktfragen:
(+49) 731 490-123
Reparaturen:
(+49) 731 490-290
service@gardena.com

Albania

COBALT Sh.p.k.
Rr. Siri Kodra
1000 Tirana

Argentina

Husqvarna Argentina S.A.
Av.del Libertador 5954 –
Piso 11 – Torre B
(C1428APR) Buenos Aires
Phone: (+54) 11 5194 5000
info.gardena@
ar.husqvarna.com

Armenia

Garden Land Ltd.
61 Tigran Mets
0005 Yerevan

Australia

Husqvarna Australia Pty. Ltd.
Locked Bag 5
Central Coast BC
NSW 2252
Phone: (+61) (0) 2 4352 7400
customer.service@
husqvarna.com.au

Austria / Österreich

Husqvarna Austria GmbH
Industriezeile 36
4010 Linz
Tel.: (+43) 732 77 01 01-485
service.gardena@
husqvarnagroup.com

Azerbaijan

Firm Progress
a. Aliyev Str. 26A
1052 Bakı

Belgium

GARDENA Belgium NV/SA
Sterrebeekstraat 163
1930 Zaventem
Phone: (+32) 2 720 92 12
Mail: info@gardena.be

Bosnia / Hercegovina

SILK TRADE d.o.o.
Industrijska zona Bukva bb
74260 Tešanj

Brazil

Husqvarna do Brasil Ltda
Av. Francisco Matarazzo,
1400 – 19º andar
São Paulo – SP
CEP: 05001-903
Tel. 0800-112252
marketing.br.husqvarna@
husqvarna.com.br

Bulgaria

Хускварна България ЕООД
Бул. „Андрей Липчев“ № 72
1799 София
Tel.: (+359) 02/975 3076
www.husqvarna.bg

Canada / USA

GARDENA Canada Ltd.
100 Summerlea Road
Brampton, Ontario L6T 4X3
Phone: (+1) 905 792 9330
info@gardenacanada.com

Chile

Maquinarias Agroforestales
Ltda. (Maga Ltda.)
Santiago, Chile
Avda. Chesterton
8355 comuna Las Condes
Phone: (+56) 2 202 4417
Dalton@maga.cl
Zipcode: 7560330
Temuco, Chile
Avda. Valparaiso # 01466
Phone: (+56) 45 222 126
Zipcode: 4780441

China

Husqvarna (China) Machinery
Manufacturing Co., Ltd.
No. 1355, Jia Xin Rd.,
Ma Lu Zhen, Jia Ding Dist.,
Shanghai
201801
Phone: (+86) 21 59159629
Domestic Sales
www.gardena.com.cn

Colombia

Husqvarna Colombia S.A.
Calle 18 No. 68 D-31, zona
Industrial de Montevideo
Bogotá, Cundinamarca
Tel. 571 2922700 ext. 105
jairo.salazar@
husqvarna.com.co

Costa Rica

Compania Exim
Euroberoamericana S.A.
Los Colegios, Moravia,
200 metros al Sur del Colegio
Saint Francis – San José
Phone: (+506) 297 68 83
exim_euro@racsa.co.cr

Croatia

SILK ADRIA d.o.o.
Josipa Lončara 3
10090 Zagreb
Phone: (+385) 1 3794 580
silk.adria@zg.t-com.hr

Cyprus

Med Marketing
17 Digeni Akrita Ave
P.O. Box 27017
1641 Nicosia

Czech Republic

Husqvarna Česko s.r.o.
Türkova 2319/5b
149 00 Praha 4 – Chodov
Bezpłatná infolinka:
800 100 425
servis@cz.husqvarna.com

Denmark

GARDENA / Husqvarna
Consumer Outdoor Products
Salgsafdelning Danmark
Box 9003
S-200 39 Malmö
info@gardena.dk

Dominican Republic

BOSQUESA, S.R.L
Carretera Santiago Licey
Km. 5 ½
Esquina Copal II.
Santiago
Dominican Republic
Phone: (+809) 736-0333
joserbosquesa@claro.net.do

Ecuador

Husqvarna Ecuador S.A.
Arupos E1-181 y 10 de
Agosto Quito, Pichincha
Tel. (+593) 22800739
francisco.jacom@
husqvarna.com.ec

Estonia

Husqvarna Eesti OÜ
Consumer Outdoor Products
Kesk tee 10, Aaviku küla
Rae vald
Harju maakond
75305 Estonia
kontakt.etj@husqvarna.ee

Finland

Oy Husqvarna Ab
Consumer Outdoor Products
Lauttarhankatu 8 / P.L 3
00581 HELSINKI
info@gardena.fi

France

Husqvarna France
9/11 Allée des pierres mayettes
92635 Gennévilliers Cedex
France
http://www.gardena.com/fr
N° AZUR: 0 810 00 78 23
(Prix d'un appel local)

Georgia

ALD Group
Bellashvili 8
1159 Tbilisi

Great Britain

Husqvarna UK Ltd
Preston Road
Aycliffe Industrial Park
Newton Aycliffe
Consumer Durham
DL5 6UP
info.gardena@
husqvarna.co.uk

Greece

Π.ΠΑΠΑΔΟΠΟΥΛΟΣ ΑΕΒΕ
Λεωφ. Αθηνών 92
Αθήνα
Τ.Κ.104 42
Ελλάδα
Τηλ. (+30) 210 5193 100
info@papadopoulos.com.gr

Hungary

Husqvarna Magyarországi Kft.
Ezred u. 1-3
1044 Budapest
Telefon: (+36) 1 251-4161
vevoszolgalat.husqvarna@
husqvarna.hu

Iceland

Ó. Johnson & Kaaber
Tunguhalsi 1
110 Reykjavik
ojo@oik.is

Ireland

Husqvarna UK Ltd
Preston Road
Aycliffe Industrial Park
Newton Aycliffe
Consumer Durham
DL5 6UP
info.gardena@
husqvarna.co.uk

Italy

Husqvarna Italia S.p.A.
Via Como 72
32068 VALMADRERA (LC)
Phone: (+39) 0341.203.111
info@gardenaitalia.it

Japan

KAKUICHI Co. Ltd.
Sumitomo Realty &
Development Kojimachi
BLDG., 8F
5-1 Nibanencho
Chiyoda-ku
Tokyo 102-0084
Phone: (+81) 33 264 4721
m_ishihara@kaku-icchi.co.jp

Kazakhstan

LAMED Ltd.
155/1, Tazhibayevoy Str.
050060 Almaty
IP Schmidt
Abayavenue 3B
110 005 Kostanay

Korea

Kyung Jin Trading CO.,LTD.
107-4, SunDuk Bld.,
YangJae-dong,
Seocho-gu,
Seoul, (zipcode: 137-891)
Phone: (+82) (0)2 574-6300

Kyrgyzstan

Alye Maki
av. Molodaya Guardir J 3
720014
Bishkek

Latvia

Husqvarna Latvija
Consumer Outdoor Products
Bākužu iela 6
LV-1024 Rīga
info@husqvarna.lv

Lithuania

UAB Husqvarna Lietuva
Consumer Outdoor Products
Atleties pl. 77C
LT-52104 Kaunas
centras@husqvarna.lt

Luxembourg

Magasins Jules Neuberg
39, rue Jacques Stas
Luxembourg-Gasperich 2549
Case Postale No. 12
Luxembourg 2010
Phone: (+352) 40 14 01
api@neuberg.lu

Mexico

AFOSA
Av. Lopez Mateos Sur # 5019
Col. La Calma 45070
Zapopan, Jalisco
Mexico
Phone: (+52) 33 3818-3434
icornej@afosa.com.mx

Moldova

Convel S.R.L.
290A Muncesti Str.
2002 Chisinau

Netherlands

GARDENA Nederland B.V.
Postbus 50176
1305 AD ALMERE
Phone: (+31) 36 521 00 00
info@gardena.nl

Neth. Antilles

Jonka Enterprises N.V.
Sta. Rosa Weg 196
P.O. Box 8200
Curaçao
Phone: (+599) 9 767 66 55
pgrm@jonka.com

New Zealand

Husqvarna New Zealand Ltd.
PO Box 76-437
Manukau City 2241
Phone: (+64) (0) 9 9202410
support.nz@husqvarna.co.nz

Norway

GARDENA
Husqvarna Consumer
Outdoor Products
Salgskontor Norge
Klevereien 6
1540 Vestby
info@gardena.no

Peru

Husqvarna Perú S.A.
Jr. Ramón Cárcamo 710
Lima 1
Tel: (+51) 1 3320400 ext.416
juan.remuzog@
husqvarna.com

Poland

Husqvarna
Poland Spółka z o.o.
ul. Wysockiego 15 b
03-371 Warszawa
Phone: (+48) 22 330 96 00
gardena@husqvarna.com.pl

Portugal

Husqvarna Portugal, SA
Laga – Albarraque
2635 – 595 Rje de Mouro
Tel.: (+351) 21 922 85 30
Fax: (+351) 21 922 85 36
info@gardena.pt

Romania

Madex International Srl
Soseaua Odaii 117-123,
RO 015603 Bucuresti, S 1
Phone: (+40) 21 352.76.03
madex@ines.ro

Russia / Россия

ООО „Хускварна“
141400, Московская обл.,
г. Химки,
улица Ленинградская,
владение 39, стр.6

Бизнес Центр
„Химки Бизнес Парк“,
помещение 0802, 04
http://www.gardena.ru

Serbia

Domel d.o.o.
Autoput za Novi Sad bb
11273 Belgrade
Phone: (+381) 11 848 88 12
miroslav.jejina@domel.rs

Singapore

Hy-Ray PRIVATE LIMITED
40 Jalan Pemimpin
#02-08 Tat Ann Building
Singapore 577185
Phone: (+65) 6253 2277
shying@hyray.com.sg

Slovak Republic

Husqvarna Česko s.r.o.
Türkova 2319/5b
149 00 Praha 4 – Chodov
Bezpłatná infolinka:
800 154 044
service@sk.husqvarna.com

Slovenia

Husqvarna Austria GmbH
Industriezeile 36
4010 Linz
Tel.: (+43) 732 77 01 01-485
service.gardena@
husqvarnagroup.com

South Africa

Husqvarna
South Africa (Pty) Ltd
Postnet Suite 250
Private Bag X6,
Cascades, 3202
South Africa
Phone: (+27) 33 846 9700
info@gardena.co.za

Spain

Husqvarna España S.A.
Calle de Rivas nº 10
28052 Madrid
Phone: (+34) 91 708 05 00
atencioncliente@gardena.es

Suriname

Agrofix n.v.
Verlengde Hogestraat # 22
Phone: (+597) 472426
agrofix@sr.net
Pobox : 2006
Paramaribo
Suriname – South America

Sweden

Husqvarna AB
S-561 82 Huskvarna
info@gardena.se

Switzerland / Schweiz

Husqvarna Schweiz AG
Consumer Products
Industriestrasse 10
5506 Mägenwil
Phone: (+41) (0) 62 887 37 90
info@gardena.ch

Turkey

GARDENA Dost Diş Ticaret
Müesseslik A.Ş.
Sanayi Cad. Adil Sokak
No: 1/B Kartal
34873 İstanbul
Phone: (+90) 216 38 93 939
info@gardena-dost.com.tr

Ukraine / Україна

«Хусварна Україна»
Ів. Васильківська, 34,
офіс 204-р
03022, Київ
Тел. (+380) 044 498 39 02
info@gardena.ua

Uruguay

FELI SA
Entre Rios 1083 CP 11800
Montevideo – Uruguay
Tel: (+598) 22 033 144
info@felisa.com.uy

Venezuela

Corporación Casa y Jardín C.A.
Av. Caroni, Edif. Trezmen, P.B.
Collinas de Bello Monte.
1050 Caracas.
Tlf: (+58) 212 992 33 22
info@casayjardin.net.ve

19030-20.961.02/0516
© GARDENA
Manufacturing GmbH
D-89070 Ulm
http://www.gardena.com