GARDENA Large-Area Pop-Up Irrigation
AquaContour automatic

1. SAFETY

IMPORTANT!
Read the operator’s manual carefully before use and keep for future reference.

Rechargeable battery:
The large-area pop-up irrigation unit contains rechargeable lithium-ion batteries, which are automatically charged via a built-in solar cell.

When the rechargeable battery is almost flat (e.g. due to soiling of the protective panel of the solar cell), irrigation will only cover a minimal range.

To fully charge the flat rechargeable battery it will take approx. 4 days of sunshine (8 hours each) or some 10 days with cloudy weather until the battery is fully charged again.

Information about usage:
The large-area pop-up irrigation should not be combined with other sprinklers in one irrigation line.

If there is a change in the range of the largearea pop-up irrigation, the pressure conditions will change in the irrigation line, so altering the range of the other sprinkler.

Only use separate individual water channels for watering. Do not install in series with other sprinklers.

The ranges selected may vary with major fluctuations in pressure in the water pipe.

Pressurized tank units (with pressure chamber) to supply water to the sprinkler are not recommended as they cause fluctuations in pressure with the switch-on/off pressure.

Sand and other abrasive substances in the water will result in faster wear and reduced output.

With water containing sand a Central Filter (e.g. GARDENA Central Filter Art. 1510) should be used.

Do not run over sprinklers installed level with ground with a lawn rake or aerator.

DANGER! Cardiac arrest!
This product 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 you operate the product.

DANGER! Risk of suffocation!
Small parts can be easily swallowed. There is also a risk that the polybag can suffocate toddlers. Keep toddlers away when you assemble the product.

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 product. Persons with reduced physical or mental abilities may use the product only if they are supervised or instructed by a responsible person. Children must be supervised to ensure that they do not play with the product. Never operate the product when you are tired, ill or under the influence of alcohol, drugs or medicine.

Intended use:
The GARDENA Large-Area Pop-Up Irrigation forms part of the GARDENA Irrigation System and is designed to be used solely outdoors in domestic and private gardens to water lawns and garden areas.

DANGER! It is not permitted to use the large-area pop-up irrigation for industrial or commercial applications and in conjunction with chemicals, food-stuffs, highly combustible or explosive substances.
2. FUNCTION

Control panel [Fig. F1]:
The GARDENA Large-Area Pop-up Irrigation AquaCon-tour automatic can be used to water individual garden areas. A jet of water slowly turns in a circle to the end of the programmed sector, stops, and turns back again, altering the spray range depending on the ranges programmed. The control panel is used to programme the irrigation contour points.

1. Menu button: Choose between programming mode (Set) and operating mode (Auto).
2. “+” button: Increases irrigation range.
3. “-” button: Decreases irrigation range.
4. OK button: Stores the irrigation range selected.
5. Set LED: Indicates programming mode.
6. Auto LED: Indicates automatic operating mode. The LED flashes every 10 seconds.

3. INITIAL OPERATION

Select correct location for Large-Area Pop-Up Irrigation [Fig. I1/I2]:
Correct location:
A Circle water distribution:
• With circle water distribution the large-area pop-up irrigation should be positioned as centrally as possible in the watering area to ensure that the irrigation width is not greatly affected by external influences such as wind.

B Sector water distribution:
• With sector water distribution the large-area pop-up irrigation should be positioned right at the edge of the watering area (e.g. at the corner of the house).
• The large-area pop-up irrigation must be positioned at a point in the watering sector from which it is possible to water the entire garden area required. The maximum range is 9 m (with 2 bar flow pressure at the irrigation unit).
• The large-area pop-up irrigation must be installed in a position which is sunny all year round to ensure the solar cell receives sufficient light.

Incorrect location:
1: No obstacles (e.g. walls, trees, etc.) should be located in the watering sector. It must be possible to access every contour point of the areas to be watered in a straight line. With the maximum range the spray height can reach approx. 5 m.
2: The minimum range is 2.5 m (at 2 bar). With circle water distribution the large-area pop-up irrigation must therefore be located 2.5 m from the edge in all directions (A). If this is not possible the large-area pop-up irrigation should be positioned at the edge and the watering area will be a circle sector (B).
3: Erratic spray-range changes must be avoided. The smaller the angle α, the greater the deviation from the programmed contour is.

Install Large-Area Pop-Up Irrigation [Fig. I3]:
Before installing the large-area pop-up irrigation, you must set up an above-ground test to check whether the large-area pop-up irrigation can actually water the required area at this location.

The large-area pop-up irrigation has a 3/4” female thread and is connected to the 25 mm Connecting Pipe Art. 2700/2701/2718 using the GARDENA L-piece Art. 2781.
1. Install the above-ground test set-up and check whether the large-area pop-up irrigation can water the required area (see 4. OPERATION).
2. If the large-area pop-up irrigation has watered the required area in the test, install a pack of coarse gravel approx. 20 cm x 20 cm x 20 cm in size underneath the unit. This ensures proper functioning of the drain valve.
3. Install the upper edge of the large-area pop-up irrigation level with the turf. This prevents any damage when mowing the lawn.

Remove protective plastic film of solar cell:
→ Take off transportation protective plastic film from the protective panel of the solar cell.

4. OPERATION

Select watering sector [Fig. O1]:
A watering sector from 25° to 360° can be selected. To prevent areas being watered unintentionally (e.g. house), the sector should first be selected roughly (slightly too small).

Roughly select sector:
1. Close water supply.
2. Turn the nozzle head by hand to the middle of the watering sector (e.g. P4).
3. Roughly select watering sector: turn right sector stop to right-hand side (e.g. P9) and left sector stop to left-hand side (e.g. P2).

Note: When the water supply is open, the sector-stop is shifted during switching of the turn direction to its end position.

Re-adjust sector:
1. Open water supply.
2. Watch watering sector and re-adjust the sector-stops and according to the sector limits (P1 and P10) until

EN
the change in direction matches the required irrigation limits. If watering in a complete circle, the two sector stops 1 and 3 must be completely pushed together between P1 and P10.

**Anti-vandal device:**
If the nozzle head is violently turned over the sector-stops then the vandalism protection is triggered. As soon as the water supply is open, the sprinkler moves in one direction until the set sector has been achieved again.

**Programme contour points of irrigation sector [Fig. O2/F1/O3]:**
The watering sector has to be selected before programming. Up to 50 contour points can be programmed with the large area pop-up irrigation. The more points that are programmed, the more precisely the contour will be described (e.g. with a circular arc P7 – P10).

1. Open the two locks 1 and raise the cover 2.
2. Open water supply. *When using for the first time, the minimum range (2.5 m with a flow pressure of 2 bar at the sprinkler) is selected.*
3. Press OK button 4. The green Auto LED 6 lights up.
4. Press Menu button 1. The red Set LED 5 lights up.
5. Turn the nozzle head 10 on the orange ring by hand to the left-hand sector limit (in the example P1) and hold.
6. Use the two buttons “+” button 2 and “-” button 3 to set the range so that it reaches P1.
7. Press OK button 4. The green Auto LED 6 lights up for 1 second and the first point P1 has been stored. Press 4.
8. Turn the nozzle head 10 on the orange ring by hand to the next irrigation point (e.g. P2) and hold.
9. Use the two buttons “+” button 2 and “-” button 3 to set the range so that it reaches P2 for example.

**5. MAINTENANCE**

**Clean dirt filter [Fig. M1]:**
1. Open both locks 1 and raise the cover 2.
2. Turn the dirt filter 3 anticlockwise 1 and pull out carefully 2 (bayonet coupling).
3. Clean dirt filter 3 under clean running water.
4. Refit dirt filter 3 in reverse order.
5. Close cover 2 and both locks 1.

**Clean nozzles [Fig. M2/M3]:**
If the watering pattern is no longer even, the nozzles can be cleaned using the cleaning needle provided.
1. Open both locks 1 and raise the cover 2.
2. Turn the cleaning needle 10 (e.g. with a coin) anticlockwise through 180° 1 and pull out carefully 2 (bayonet coupling).
3. Clean nozzles 5 with cleaning needle 10.
4. Refit cleaning needle 5 in reverse order.
5. Close cover 2 and both locks 1.

**Clean protective panel of solar cell:**
To make sure that the rechargeable battery is always sufficiently charged, the protective panel of the solar cell has to be cleaned if soiled.

**No caustic/abrasive cleaning agents or hard objects should be used.**
→ Clean protective panel of solar cell with a damp cloth.
6. STORAGE

To put into storage/Overwintering:

The large-area pop-up irrigation is frostproof so it can be left in the ground during winter.

1. Close cover and both locks.
2. Close water supply.
   The large-area pop-up irrigation is automatically emptied via the built-in drain valve.

Disposal:
(in accordance with RL2012/19/EC)
The product must not be disposed of to normal household waste. It must be disposed of in line with local environmental regulations.

IMPORTANT!
Dispose of the product through or via your municipal recycling collection centre.

Disposal of the battery:
The GARDENA battery contains lithium-ion cells that should not be disposed of with normal household waste at the end of its life.

IMPORTANT!
→ Dispose of the batteries through or via your municipal recycling collection centre.

1. Discharge the lithium-ion cells completely (contact the GARDENA Service).
2. Protect the contacts on the lithium-ion cells against short circuits.
3. Dispose of the lithium-ion cells properly.

7. TROUBLESHOOTING

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrigation width smaller than on initial start-up</td>
<td>Dirt filter soiled.</td>
<td>→ Clean dirt filter.</td>
</tr>
<tr>
<td></td>
<td>Tap not opened sufficiently.</td>
<td>→ Open tap further.</td>
</tr>
<tr>
<td></td>
<td>Water pressure too low.</td>
<td>→ Increase water pressure/water supply.</td>
</tr>
<tr>
<td></td>
<td>Rechargeable batteries almost flat (Auto and Set LED flashing)/protective panel of solar cells soiled.</td>
<td>→ Ensure solar cells are exposed to sufficient sunlight/clean protective panel. If the rechargeable battery is almost flat, the range is reduced to the min. level.</td>
</tr>
<tr>
<td></td>
<td>Large-area pop-up irrigation is in energy-saving mode (4 weeks without energy supply or operation).</td>
<td>→ Press OK button.</td>
</tr>
<tr>
<td></td>
<td>Irrigation range is programmed incorrectly.</td>
<td>→ Reprogramme irrigation range.</td>
</tr>
<tr>
<td>Watering pattern uneven</td>
<td>Nozzles soiled.</td>
<td>→ Clean nozzles.</td>
</tr>
<tr>
<td></td>
<td>Nozzle head soiled.</td>
<td>→ Clean nozzle head.</td>
</tr>
<tr>
<td></td>
<td>Nozzle head damaged.</td>
<td>→ Contact GARDENA Service.</td>
</tr>
<tr>
<td>Auto and Set LED flashing simultaneously</td>
<td>Rechargeable batteries almost discharged.</td>
<td>→ Ensure solar cell is exposed to sufficient sunlight.</td>
</tr>
<tr>
<td>No LED flashing</td>
<td>Large-area pop-up irrigation is in energy-saving mode.</td>
<td>→ Press OK button.</td>
</tr>
<tr>
<td></td>
<td>Rechargeable battery defective.</td>
<td>→ Contact GARDENA Service.</td>
</tr>
<tr>
<td>Nozzle head leaking</td>
<td>Soiling on nozzle head.</td>
<td>→ Press down nozzle head several times during operation.</td>
</tr>
</tbody>
</table>

NOTE: 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

<table>
<thead>
<tr>
<th>Large-Area Pop-Up Irrigation</th>
<th>Unit</th>
<th>Value AquaContour automatic (Art. 1559)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rechargeable battery</td>
<td></td>
<td>Lithium-ion cells 2150 mAh (charged via solar cell)</td>
</tr>
<tr>
<td>Operating life of rechargeable battery (approx.)</td>
<td>years</td>
<td>5</td>
</tr>
<tr>
<td>Connection</td>
<td></td>
<td>3/4&quot; female thread</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>°C</td>
<td>5 – 60</td>
</tr>
<tr>
<td>Pressure range</td>
<td>bar</td>
<td>1 – 6</td>
</tr>
<tr>
<td>Irrigation width</td>
<td>m</td>
<td>2.5 – 9 (at 2 bar) / 4 – 10.5 (at 4 bar)</td>
</tr>
<tr>
<td>Watering area</td>
<td>m²</td>
<td>255 (at 2 bar) / 350 (at 4 bar)</td>
</tr>
<tr>
<td>Watering sector</td>
<td></td>
<td>25 – 360°</td>
</tr>
<tr>
<td>Water flow rate with max. range (approx.)</td>
<td>l/h</td>
<td>600 (at 2 bar) / 800 (at 4 bar)</td>
</tr>
</tbody>
</table>

9. ACCESSORIES

[Fig. A1]:
GARDENA Water Computer  For automatic watering control  Art. 1825, 1830, 1835, 1860, 1862, 1864, 1874
GARDENA L-piece  For connection to below-ground water supply  Art. 2781
GARDENA Connecting Pipe 25 mm  For below-ground installation of water supply  Art. 2700, 2701, 2718
GARDENA Connector  For below-ground installation of water supply  Art. 2761
GARDENA Connecting Point  For below-ground installation of water supply  Art. 2722
GARDENA Drainage Valve  For below-ground installation of water supply  Art. 2760
GARDENA T-piece  For below-ground installation of water supply  Art. 2790

10. SERVICE/WARRANTY

Service:
Please contact the address on the back page.

Warranty statement:
In the event of a warranty claim, no charge is levied to you for the services provided.
GARDENA Manufacturing GmbH grants a warranty for all original GARDENA new products for two years from the date of original purchase from the retailer, provided that the devices have been for private use only. This manufacturer’s warranty does not apply to products acquired second hand. This warranty includes all significant defects of the product that can be proved to be material or manufacturing faults. This warranty is fulfilled by supplying a fully functional replacement product or by repairing the faulty product sent to us free of charge; we reserve the right to choose between these options. This service is subject to the following provisions:
• The product has been used for its intended purpose as per the recommendations in the operating instructions.
• Neither the purchaser nor a third party has attempted to open or repair the product.
• Only Original GARDENA replacement parts and wear parts have been used for operation.
• Presentation of the receipt.
Normal wear and tear of parts and components (such as blades, blade fixing parts, turbines, light bulbs, V-belts/toothed belts, impellers, air filters, spark plugs), visual changes, wear parts and consumables are excluded from the warranty.
This manufacturer’s warranty is limited to replacement and repair of products in accordance with the abovementioned conditions. The manufacturer’s warranty does not constitute an entitlement to lodge other claims against us as a manufacturer, such as for damages. This manufacturer’s warranty does not, of course, affect statutory and contractual warranty claims against the dealer/retailer.
The manufacturer’s warranty is governed by the law of the Federal Republic of Germany.
In case of a warranty claim, please return the faulty product, together with a copy of the receipt and a description of the fault, with postage paid to the service address.
Consumables:
As a wear part the dirt filter is not covered by the guarantee.

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Product liability
In accordance with the German Product Liability Act, we hereby expressly declare that we accept no liability for damage incurred from our products where said products have not been properly repaired by a GARDENA-approved service partner or where original GARDENA parts or parts authorised by GARDENA were not used.
**HU Termékszavatosság**

A németországi termékszavatossági törvénnyel összhangban ezennel nyomatékosan kijelentjük, hogy nem vállalunk felelősséget a termékeinkben keletkezett olyan károkért, amelyek valamely GARDENA által jóváhagyott szervizpartner által nem megfelelően végzett javításból adódítak, vagy amely során nem eredeti GARDENA alkatrészeket vagy a GARDENA által jóváhagyott alkatrészeket használtak fel.

**CS Odpovědnost za výrobek**

V souladu s německým zákonem o odpovědnosti za výrobek tímto výslovně prohlašujeme, že nepřijímáme žádnou odpovědnost za poškození vzniklá na našich výrobcích, kdy zmíněné výrobky nebyly řádně opraveny schváleným servisním partnerem GARDENA nebo kdy nebyly použity originální náhradní díly GARDENA nebo náhradní díly auto-rizované společnosti GARDENA.

**SK Zodpovednosť za produkt**

V súlade s nemeckými právnymi predpismi upravujúcimi zodpovednosť za výrobok týmto výslovné prehlasujeme, že nenesieme žiadnu zodpovednosť za škody spôsobené nášimi výrobkami, v prípade ktorých neboli náležité opravy vykonané servisným partnerom schváleným spoločnosťou GARDENA alebo nebol použitý diely spoločnosti GARDENA alebo diely schválené spoločnosťou GARDENA.

**EL Ευθύνη προϊόντος**

Σύμφωνα με τον γερμανικό νόμο περί Ευθύνης για τα Προϊόντα, με το παρόν δηλώνουμε ρητώς ότι δεν αποδέχομαστε καμία ευθύνη για τυχόν ζημίες που προκύπτουν από τα προϊόντα μας εάν αυτά δεν έχουν επισκευαστεί από κάποιο εγκεκριμένο συνεργάτη επισκευών της GARDENA ή εάν δεν έχουν χρησιμοποιηθεί αυθεντικά εξαρτήματα GARDENA ή εξαρτήματα εγκεκριμένα από την GARDENA.

**SL Odgovornost proizvajalca**

V skladu z nemškimi zakoni o odgovornosti za izdelke,izrecno izjavljajo, da ne sprejemamo nobene odgovornosti za škodo, ki jo povzročijo naši izdelki, če teh niso ustrezno popravili GARDENINI odobreni servisni partnerji ali pri tem niso bili uporabljeni originalni GARDENINI nadomestni deli ali GARDENINIMI homologiranimi nadomestnimi deli.

**HR Pouzdanost proizvoda**

Sukladno njemačkom zakonu o pouzdanosti proizvoda, ovime izričito izjavljamo kako ne prihvaćamo nikakvu odgovornost za oštećenja na našim proizvodima nastala uslijed neispravnog popravka od strane servisnog partnera kojeg odobrava GARDENA ili uslijed nekorištenja originalnih GARDENA dijelova ili dijelova koje odobrava GARDENA.

**RO Răspunderea pentru produs**

În conformitate cu Legea germană privind răspunderea pentru produs, declarăm în mod expres prin prezentul document că nu acceptăm nicio răspundere pentru defectiunile suferite de produsele noastre atunci când acestea nu au fost reparate în mod corect de un atelier de service partener, aprobat de GARDENA, sau când nu au fost utilizate piese GARDENA originale sau piese autorizate de GARDENA.
EN EC Declaration of Conformity
The undersigned, GARDENA Germany AB, PO Box 7454, S-103 92 Stockholm, Sweden, hereby certifies that, when leaving our factory, the units indicated below are in accordance with the harmonised EU guidelines, EU standards of safety and product specific standards. This certificate becomes void if the units are modified without our approval.
**AquaContour automatic**

<table>
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<th>EU Richtlinien:</th>
<th>Artikelnummer:</th>
<th>Številka izdelka:</th>
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**Anbringungsjahr der CE-Kennzeichnung:**

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**Hinterlegte Dokumentation:**

GARDENA-Technische Dokumentation, M. Kugler 89079 Ulm

**Deposited Documentation:**

GARDENA Technical Documentation, M. Kugler 89079 Ulm

**Documentation déposée:**

Documentation technique GARDENA, M. Kugler 89079 Ulm

**EN ISO 12100**

<table>
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<td>2011/65/EG</td>
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**Vielflächen-Versenkregner**

Large-Area Pop-up Irrigation

Arroseur escamotable multisurfaces

Verzonken multi-instelbare sproeier

AquaContour automatic Pop-up

Irrigatore Pop-up per superfici irregolari

Aspersor emergente de multiples superficies

Aspersores embutidos de grandes superficies

Zraszacz wyruszalny

Süllyesztett sokfelület-esőztető

Viceplošný výsuvný zadešťovač

Autočmato Plošnicí Pop-up nesymetrických površin

Talni razpršilnik za več površin

Aspersor îngropat pentru suprafeţe poligonale

Ulm, den 25.11.2015

Ulm, 25.11.2015

Fait à Ulm, le 25.11.2015

Ulm, 25.11.2015

Ulm, 25.11.2015

Ulm, 25.11.2015

Ulm, 25.11.2015

Ulm, 25.11.2015

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Ulm, 25.11.2015

Ulm, 25.11.2015

Ulm, 25.11.2015

Ekor választott

O representante

Pooblaščenec

Conducerea tehnică

**Reinhard Pompe**

Vice President

**GARDENA Technical Documentation,**

M. Kugler 89079 Ulm

**Déposée documentation technique GARDENA,**

M. Kugler 89079 Ulm