



| D  | <b>Gebrauchsanweisung</b><br>Funkzentrale |
|----|---|
| GB | Operating Instructions                    |
|    | Central Radio Control Unit                |
| F  | Mode d'emploi                             |
|    | Télécommande                              |
| NL | Gebruiksaanwijzing                        |
|    | Afstandsbediening met houder              |
| 1  | Istruzioni per l'uso                      |
|    | Centralina radio-trasmittente             |

# **GARDENA Central Radio Control Unit**

Welcome to the Garden of GARDENA ...



Please read these operating instructions carefully and observe the notes given. Use these instructions to familiarise yourself with the Central Radio Control Unit, its correct use and the notes on safety.



For safety reasons, children under the age of 16 as well as persons not familiar with these operating instructions should not use this Central Radio Control Unit.

 $\rightarrow$  Please keep these operating instructions in a safe place.

| Contents | <ol> <li>Where to Use Your GARDENA Central Radio Control</li> </ol> | l Unit 19 |
|----------|---|-----------|
|          | 2. For Your Safety  |           |
|          | 3. Key Functions and Display  |           |
|          | 4. Quick Reference Operating Instructions                           |           |
|          | 5. Creating a Control Plan  |           |
|          | 6. Labelling Irrigation Valves and Radio Switch                     |           |
|          | 7. Operating the Control Systems                                    |           |
|          | 8. Special Functions  |           |
|          | 9. Trouble-Shooting   |           |
|          | 10. Putting Out of Operation  |           |
|          | 11. Technical Data  | 34        |
|          | 12. Service   |           |

# 1. Where to Use Your GARDENA Central Radio Control Unit

| Intended use | <ul> <li>This Central Radio Control Unit is part of a controlling system<br/>and can be used to control the following receivers:</li> <li>Radio Receiver Art. 1244/1245 in combination with Irrigation<br/>Valves Art. 1251/1252/1253 allows fully-automatic control of<br/>watering systems with several subsystems.</li> </ul> |
|--------------|--|
|              | I I  |



• Radio Switch **Art. 1246** for controlling 230 V electrical devices such as a garden pump for supplying water for an irrigation system, outdoor lighting or a pond pump.

GB



# 3. Kev Functions and Display

| The control signals are transmitted to the receiver. Frequent data transfer between the Central Radio Control Unit and the Receiver ensures reliable operation. | 3. Key Fund |
|---|-------------|
|   |             |
| There is no danger of interference with other 433 MHz devices (e.g. garage door opener) or other radio remote controls (e.g.                                    | 8           |

There is no dar (e.g. garage door opener) or other radio remote controls (e.g. owned by your neighbours).

Compliance with the operating instructions provided by GARDENA is a prerequisite for proper use of the Central Radio Control Unit.

The Central Radio Control Unit must only be used for controlling the Radio Receiver for GARDENA Irrigation Valves and the Radio Switch.

# 2. For Your Safety

| $\triangle$                 | Only use four 1.5-volt alkaline AA batteries to achieve the speci-<br>fied maximum operating time when the unit is not connected to<br>the mains. We recommend Varta and Energizer batteries.  |
|-----------------------------|--|
| LCD display :               | The LCD display may go blank if the outside temperature falls<br>below - 10 °C or rises above 60 °C. This has no effect whatso-<br>ever on data storage or the correct transfer of data. The LCD<br>display will function normally again when the outside tempera-<br>ture returns to the normal operating range (- 10 °C to 50 °C).<br>→ If the battery status symbol flashes on the display you must<br>replace the batteries immediately. |
| Central Radio Control Unit: | To ensure good radio reception, position your Central Radio<br>Control Unit near a window if you prefer to keep it indoors.  |
|                             | The range of the radio control unit depends on the material that<br>must be penetrated. Concrete walls or buildings made of sheet<br>metal can limit the range considerably.   |
|                             | Extreme weather conditions (fog, rain) can also restrict the range.  |
|                             | $\rightarrow$ Protect the Central Radio Control unit against moisture.   |
| Radio Receiver:             | The Radio Receivers are installed in the valve boxes of the<br>Irrigation Valves and are safe against flooding.  |
|                             | The valve box must be installed such that is it safe against flooding.   |
|                             | $\rightarrow$ Always ensure that the cover is closed.  |
|                             |  |

|         |                     |   | кеу                | Function   |
|---------|---------------------|---|--------------------|--|
|         | 3 (4)<br>/+<br>Menu | 1 | ▲/▼                | For changing or advancing specific data already entered. (If you hold down one of the $\blacktriangle$ - $\forall$ keys the display runs through the hours or minutes, for example, more quickly.) |
|         |                     | 2 | ОК                 | Confirms the values set using the $\blacktriangle$ - $\nabla$ keys.  |
| ОК      | Setup               | 3 | Reset              | Deletes all data (reset).  |
|         | Test Menu           | 4 | Setup              | For the system settings (e.g. registering receivers).  |
| Channel | Man 6               | 5 | Menu + /<br>Menu – | Changes the display level (main level, time level, programme level).   |
| Sensor  | On/Off              | 6 | Test               | Activates the test functions (e.g. battery status).  |
|         | U                   | 7 | Man<br>On/Off      | For opening or closing individual channels manually (test radio range).  |
|         |                     | 8 | Channel<br>Sensor  | Changes display from channels to sensors<br>and sensor configuration.  |

.. -

**Key Functions** 



# System Displays

(((1)))

Radio Reception Display (9):

is displayed



Battery Status Display of Central Radio Control Unit: If the voltage falls below a certain level, the battery status display (1) of the Central Radio Control Unit flashes until the battery is replaced.

#### Battery Status Display of Radio Receiver:

If the voltage falls below a certain level, the battery status display 0 and the arrows  $\rightarrow$  in front of the channels of the Radio Receiver flash until the battery is replaced.

If the battery status display flashes the valves are closed automatically.

#### Frost Warning Display:

If the temperature of a receiver falls below +5°C, the frost warning symbol 1 and the arrows  $\rightarrow$  before the channels of the receiver flash and the Central Radio Control Unit beeps.

 $\rightarrow$  Press the **OK** key to confirm the frost warning.

Please note

œ

Download from Www.Somanuals.com. All Manuals Search And Download.

# The 3 Display Levels



# Changing the Display Level:

 $\rightarrow$  Press the **Menu +** key.

The display changes to the next level.

If you do not press another key within 2 minutes, the main level appears automatically on the display.

# 4. Quick Reference Operating Instructions

| 1. Create control plan:                               | → Enter the data for the watering programmes on the control plan<br>(see Appendix).  |
|---|--|
| 2. Label irrigation valves<br>and radio switches:     | → Label the irrigation valves and radio switches corresponding to<br>the channels of the watering plan using the stickers provided.  |
| 3. Put Central Radio Control<br>Unit into operation : | <ol> <li>Mount aerial.</li> <li>Connect the Central Radio Control Unit to the mains via the<br/>power pack and insert the batteries (use 1.5-volt alkaline AA<br/>batteries only).<br/><i>The batteries prevent loss of data if a power failure occurs.</i></li> </ol>   |
| 4. Enter current time<br>and day of the week:         | <ol> <li>Set the hours using the ▲-▼ keys and confirm by pressing the OK key.</li> <li>Set the minutes using the ▲-▼ keys and confirm by pressing the OK key.</li> <li>Set the day of the week using the ▲-▼ keys and confirm by pressing the OK key.</li> </ol>   |
| 5. Register Receiver :                                | <ol> <li>Press the Setup key (e.g. using the tip of a pen).</li> <li>Insert batteries in just <u>one</u> Radio Receiver         <ul> <li>or - just <u>one</u> Radio Switch.</li> </ul> </li> <li>Set channel number(s) using the ▲-▼ keys and confirm by pressing the OK key.</li> <li>Repeat steps 1 to 3 for each receiver until you have registered all receivers.</li> </ol> |
| 6. Set the Control Programme (PROG):                  | <ol> <li>Press the Menu + key twice.</li> <li>Select the programme memory location using the ▲-▼ keys and confirm by pressing the OK key.</li> </ol>   |

- 7. Set programme start time (START-TIME):
- **8.** Set the programme run time 1. Set the hours for the programme run time using the  $\blacktriangle$ - $\nabla$  keys (RUN-TIME):
- 9. Set the watering days:

10. Assign the programme

to the channels:

11. Manual Operation:

2. Set the minutes for the programme run time using the  $\blacktriangle$ -V keys and confirm by pressing **OK**. Every 2nd or 3rd day:

and confirm by pressing the OK key.

keys and confirm by pressing **OK**.

and confirm by pressing OK.

 $\rightarrow$  Set the arrow  $\leftarrow$  to 2<sup>nd</sup> or 3<sup>rd</sup> using the  $\blacktriangle$ - $\nabla$  keys and confirm by pressing OK.

1. Set the hours for the programme start time using the ▲-▼ keys

2. Set the minutes for the programme start time using the  $\blacktriangle$ - $\nabla$ 

#### Any day of the week:

- $\rightarrow$  Set the arrow  $\leftarrow$  to the correct day using the  $\blacktriangle$ - $\nabla$  keys and confirm the day by pressing OK.
- 1. Set the arrow  $\rightarrow$  to the channel you require using the  $\blacktriangle$ - $\nabla$  keys and activate the channels by pressing OK.
- 2. Press Menu + to return to the program selection screen.
- 1. Press the Man On/Off key.
- 2. Set the  $\rightarrow$  to the channel using the  $\blacktriangle$ - $\nabla$  keys and open or close the channel by pressing OK.

The opening time is set to 30 minutes as a default but the opening time can be set manually as required (see 8.1 Opening/Closing Channel Manually).

# 5. Creating a Control Plan

#### $\rightarrow$ Enter the data of the watering programme in the control plan (see appendix).

## Example of a Control Plan:

| Receiver       | Channels | PROG | START-TIME | RUN-TIME | 3rd | 2nd | Мо | Tu | We | Th | Fr | Sa | Su | Sensors |
|----------------|----------|------|------------|----------|-----|-----|----|----|----|----|----|----|----|---------|
|                | 1        | 1    | 5:00       | 1:00     |     | х   |    |    |    |    |    |    |    | 1       |
| Sprinkler-     | 2        | 2    | 7:00       | 1:00     |     | х   |    |    |    |    |    |    |    | 1       |
| oystem         | 3        | 3    | 18:00      | 1:00     | Х   |     |    |    |    |    |    |    |    | 1       |
| Micro-Drip-    |          | 4    | 19:00      | 0:30     |     |     | х  | х  | Х  | Х  | Х  | Х  | х  | 4       |
| System         | 4        | 5    | 6:00       | 0:30     |     |     | х  | х  | Х  | Х  | Х  | х  | Х  | 4       |
| Lightline      | 5        | 6    | 20:00      | 2:00     |     |     | х  | х  | Х  | Х  | Х  | Х  | Х  | -       |
| Pond           | •        | 7    | 9:00       | 3:00     |     |     | х  | х  | Х  | Х  | Х  | Х  | Х  | -       |
| pump           | o        | 8    | 13:00      | 5:00     |     |     | х  | Х  | Х  | Х  | Х  | Х  | Х  | -       |
| Garden<br>pump | М        | _    | _          | _        |     |     |    |    |    |    |    |    |    | _       |

GB

# GB 6. Labelling Irrigation Valves and Radio Switch



→ Label the Irrigation Valves and Radio Switches using the stickers provided with the irrigation valves. Match them to the corresponding channels on the control plan.

This ensures that the channels are assigned to the radio receivers and radio switches in a clear, unambiguous way. This is particularly important when you begin to use your irrigation installation again in the spring.

(For example: Sprinkler-System = channel 1, 2 and 3, Lightline = channel 5)

# 7. Operating the Control System

(b)

**III** 

(12)

(13)



Do not install the batteries in the Radio Receivers vet and/ or plug the Radio Switch into the mains.

→ If necessary remove the batteries from the Radio Receivers and/or unplug the Radio Switches.

# 7.1 Putting the Central Radio Control Unit into Operation

- 1. Push the aerial provided to the Central Radio Control Unit.
- 2. Connect the Central Radio Control Unit to the cable of the power supply provided and plug the mains cable into a mains socket (230 V) - and -

install batteries in the Central Radio Control Unit.

The Central Radio Control Unit beeps and TIME and the D for the hours flash on the display.

3. (a) Set up the support on a suitable surface or (b) fasten the support to the wall.

# Insert the batteries in the Central Radio Control Unit:

The Central Radio Control Unit is designed to be mains-operated. The batteries prevent loss of data if a power failure occurs. The batteries have a limited working life if the Central Radio Control Unit is disconnected from the mains power or if a power outage occurs. In order to operate your Central Radio Control Unit without power from the mains, you must install four 1.5-volt alkaline (AA) batteries (do not use rechargeable batteries). These batteries are no longer used as soon as you connect your Control Unit to the mains.

- 1. Slide out the cover <sup>(12)</sup> on the back of the Central Radio Control Unit and remove the battery pack (3).
- 2. If necessary, remove flat batteries from the battery pack (1) and insert new batteries (14) in the correct position (pay attention to the +/- markings on the battery pack and the batteries).
- 3. Fit the battery pack (3) the right way round in the Central Radio Control Unit (pay attention to the +/- markings on the Central Radio Control Unit and the battery pack (5).
- 4. Slide the cover 12 back into place and close the battery compartment.

If you replace the batteries when the Control Unit is not connected to the mains you will reset the unit. TIME and **0** for the hours flash on the display and you must enter the time and day (refer to section 7.2 Setting the Current Time and Day of the Week).

Before installing the batteries in the Radio Receiver and/or plugging the Radio Switch into the mains, you must activate the registering mode of the Central Radio Control Unit. The receivers are then registered automatically (refer to section 7.3 Registering Receivers).

You must also insert four 1.5-volt AA batteries in the Radio Receiver Art. 1244/1245 (see operating instructions for Radio Receiver). The Radio Switch Art. 1246 does not require batteries because it is connected directly to a mains socket.

# 7.2 Setting the Current Time and Day of the Week

- 1. Set the hours using the  $\blacktriangle$ - $\nabla$  keys (for example 12 hours) and confirm by pressing the OK key. TIME and the minutes flash on the display.
- 2. Set the minutes using the ▲-▼ keys (for example 30 minutes) and confirm by pressing the **OK** key.

TIME and the day flash on the display.

3. Set the day using the  $\blacktriangle$ - $\nabla$  keys (for example **Sa**  $\blacksquare$  Saturday) and confirm by pressing the OK key.

The main level is displayed.

# 7.3 Registering Receivers

1. Press the **Setup** key (using the tip of a pen, for example) to call the registering mode of the Central Radio Control Unit. SETUP is displayed and the free channels flash on the display.

2. Install batteries in just one Radio Receiver – or –

plug in just one Radio Switch.

The Radio Receiver or Radio Switch is registered automatically (for example 4-channel Radio Receiver).

The receiver identification number (e.g. **278**) is displayed and the channels of the receiver flash (e.g. channel  $\rightarrow \blacksquare 1$  to  $\rightarrow \blacksquare 4$ ).

# Possible appearance of display when registering a receiver:

| 1 1 1 1<br>1 1 1  | ■ 1<br>■ 2<br>■ 3<br>■ 4    | 1<br>2<br>3<br>4 | →■1<br>2<br>3<br>4          |  |
|---|-----------------------------|------------------|-----------------------------|--|
| 4-channel<br>Radio Receiver   | 2-channel<br>Radio Receiver |                  | 1-channel<br>Radio Receiver |  |
| <ol> <li>Set the channel number(s) according to the control plan using<br/>the ▲-▼ keys (for example, ■6 to ■9) and register the chan-</li> </ol> |                             |                  |                             |  |

nels by pressing the **OK** key.

The registered channels no longer flash.

2.

3. (a)





2.

→ ■ 1 → ■ 2 → ■ 3 → ■ 4

78

SETUP

2

SETUP

78

1.

Su

1.

З.

GB

- 4. Repeat steps 2 and 3 until all receivers are registered.
- 5. Press the Menu key. The main level is displayed.
- 6. Test the radio range (refer to section 7.4 *Testing the Radio Range*).

# 7.4 Testing the Radio Range

1. Install the radio receivers/radio switches as required (do not bury the valve boxes yet).

7.5 Setting the Control Programme

The Control Unit can store 32 programmes.

Programme Memory Location 1 flashes.

START-TIME and the hours flash on the display.

saved when receivers are cancelled.

- 2. Test the Central Radio Control Unit in that room in which you plan to install the bracket for the control unit.
- 3. Open and close the channels manually to check they work correctly (refer to 8.1 *Opening and Closing Channels Manually*).
- Once you have established radio contact, bury the valve boxes and permanently install the holder for the Central Radio Control Unit.

Prerequisite: You must have set the current time and current

day. The receivers must not be registered. All programmes are

Selecting the Programme Memory Location (PROG):

1. If the main level is displayed, press the Menu + key twice.

2. Select the programme memory location using the  $\blacktriangle$ - $\nabla$  keys

(for example, memory location 18) and confirm by pressing







Setting the Programme Start Time (START-TIME):
3. Set the hours for the programme start time using the ▲-▼ keys (e.g. 15 hours) and confirm by pressing the OK key.
START-TIME and the minutes flash on the display.
4. Set the minutes for the programme start time using the ▲-▼ keys (e.g. 20 minutes) and confirm by pressing the OK key.

the OK key.

RUN-TIME and the hours flash on the display.

## Setting the Programme Run Time (RUN-TIME):

- Set the hours for the programme run time using the ▲-▼ keys (e.g. 2 hours) and confirm by pressing the OK key.
   RUN-TIME and the minutes flash on the display.
- Set the minutes for the programme start time using the ▲-▼ keys (e.g. 45 minutes) and confirm by pressing the OK key.

**CHANNEL** and the arrow  $\leftarrow$  flash in the top left-hand corner of the display next to  $3^{rd}$ .





# Setting the watering days:

(a) every 2<sup>nd</sup> or 3<sup>rd</sup> day (from current day)
(b) select any day (daily watering possible)

### 7. (a) Every 2nd or 3rd day:

Set the arrow  $\leftarrow$  to 2<sup>nd</sup> or 3<sup>rd</sup> using the  $\blacktriangle$ - $\forall$  keys (e.g. 2<sup>nd</sup>  $\leftarrow$ = every 2nd day) and confirm by pressing the OK key. The watering days (e.g. 2<sup>nd</sup>) and preview for the week (e.g. Sal, Mol, Wel, Fr) are displayed.

The days in the preview for the week depend on the current day of the week (e.g. **Sa**).

- or -

### (b) Any day of the week:

Set the arrow  $\leftarrow$  to the correct day (e.g. **Mo**  $\leftarrow$ ) using the **\blacktriangle**- $\nabla$  keys and activate (e.g. **Mo** $\blacksquare$  $\leftarrow$ ) or deactivate the day using the **OK** key.

Once you have activated all the days you require (e.g. **Mo** $\blacksquare$ , **Tu** $\blacksquare$ , **We** $\blacksquare$ ), press the  $\checkmark$  key repeatedly until the arrow  $\leftarrow$  next to **Su** disappears and appears in front of channel  $\rightarrow$  **1**.

The preview for the week (e.g. **Mo**, **Tu**, **We**) for the watering days is displayed.



#### Assigning the Programme to the Channels:

The programme only controls only the assigned channels.

- Set the arrow → to the channel you require using the ▲-▼ keys (e.g. → 3 = channel 3) and activate (e.g. →■3) or deactivate the channel by pressing the OK key.
  - Once you have activated all the channels you require (e.g.  $\blacksquare 3$  and  $\blacksquare 8$ ), Press the **Menu +** key.
- The display then changes to point 2 and the current programme data are displayed.

The receivers must be registered and the levers of the Irrigation Valves must be set to the "**AUTO**" position in order to run the set programmes.



7. (a)



# 3. 4.

# 8.1 Opening/Closing Channels Manually

#### Prerequisite:

All receivers must be registered and the levers of the Irrigation Valves must be set to the **"AUTO"** position.

Press the Man On/Off key.
 MAN is displayed and the arrow → flashes.
 The channels flash until the radio connection is established.
 It may take up to 60 seconds to establish a connection.

Set the arrow → to the channel you require using the ▲-▼ keys and open the channel (e.g. →■7) or close the channel (e.g. → 7) by pressing the OK key.

The symbol  $\blacksquare$  appears in front of the open channel and the opening time **RUN-TIME** (e.g. **0:30**) is displayed.

If a channel is opened manually, the hours for the opening time and **RUN-TIME** flash for 5 seconds. You can change the opening time during these 5 seconds. The opening time can be set between 0:01 and 9:59.

- 3. Change the hours for the opening time within 5 seconds using the ▲-▼ keys (e.g. 1) and confirm by pressing the OK key.
- Change the minutes for the opening time using the ▲-▼ keys (e.g. 10) and confirm by pressing the OK key.
- 5. Press **Man On/Off** to end manual operation. *The main level is displayed.*

Programmes which are scheduled to run during this manual opening time are indicated by **PROG** and are not interrupted.

# 8.2 Changing Current Time and Day of the Week

1. Press the Menu + key. The time level is displayed.

2. Change the time and/or the day (refer to section 7.2 *Setting the Current Time and Day of the Week*).

# 8.3 Changing an Existing Programme

If a programme already exists on one of the 32 programme memory locations, you can make changes to this programme without having to create the programme again from scratch.

The values for the programme start time, run time and cycle and the assigned channels are pre-set. Therefore, you only need to alter the values you want to change. You can accept the values you do not want to change by simply pressing the **OK** key.

# 8.4 Ending the Programming Mode Early

 $\rightarrow$  Press the **Menu +** key twice.

The programming mode is closed and the changes you have entered are saved.

The main level appears.





З.

-

MASTER

SETUP

→ **■** 3 **■** 4

> 11

MASTER

SETUP

# 8.5 Cancelling Receivers

1. Press the Setup key (e.g. using the tip of a pen).

SETUP is displayed and the free channels flash on the display.

2. Press the Menu + key (display/register receivers).

An arrow  $\rightarrow$  is displayed before the first registered receiver 1. (e.g. 1 = first receiver,  $\rightarrow \blacksquare$  1)

- Press the ▲-▼ keys repeatedly until OFF and the arrow → before the desired receiver start to flash (e.g. *3* = third receiver, →■ 6 to →■ 9).
- Press the OK key to cancel the receiver. The symbols ■ are deleted and the receiver is cancelled.

An arrow  $\rightarrow$  is displayed before the first receiver 1 that is still registered (e.g.  $\rightarrow \blacksquare 1$ ).

# 8.6 Master Channel

The master channel is a channel that is activated in conjunction with other channels. This is important, for example, if an irrigation system is supplied with water by a pump that should be turned on whenever one of the irrigation valves is activated.

# Registering Radio Receivers / Radio Switches as the Master Channel:

- Press the Setup key (e.g. using the tip of a pen) to enter the registering mode for the Central Radio Control Unit.
   SETUP is displayed and the free channels flash on the display.
- 2. Install batteries in the Central Radio Control Unit **or** plug the radio switch you want to register as the master channel into the Control Unit.

The radio receiver or radio switch is then registered automatically.

3. Set the master channel M using the ▲-▼-keys and register by pressing the **OK** key. *The radio receiver / radio switch is registered as the master channel.* 

## Assigning the Master Channel:

- 1. Register the master channel (see 7.3 Registering Receivers).
- 2. Press the Setup key (e.g. using the tip of a pen).
- SETUP is displayed and the free channels flash on the display.
- Press the Menu + key repeatedly until MASTER appears on the display and the → in front of the first registered channel flashes.
- 4. Select the channel using the ▲-▼ keys and deactivate (e.g.
   → 11) or activate the master channel by pressing the OK key.

2.



3.

# 3. 4.

4.

PIN

SETUP

9

# 8.7 Changing the Default Manual Opening Time

The default value for the manual opening time can be set between **0:01** and **9:59**. The Central Radio Control Unit is pre-set to **0:30**.

- 1. Press the **Setup** key (e.g. using the tip of a pen).
  - SETUP is displayed and the free channels flash on the display.
- Press and hold down the Man On/Off key for approx.
   3 seconds.

**MAN** and **RUN-TIME** are displayed and the hours of the opening time flash.

- 3. Set the hours for the opening time using the ▲-▼ keys (e.g. *1*) and confirm by pressing the **OK** key.
- Set the minutes for the opening time using the ▲-▼ keys (e.g. 10) and confirm by pressing the OK key.

# 8.8 Changing the PIN

The 3-digit **PIN** (Personal Identification Number) which can be set between **000** and **999**, prevents unauthorised access to your watering programmes. You are only asked to enter your PIN if the number is not **000**.

- 1. Press the **Setup** key (e.g. using the tip of a pen). **SETUP** *is displayed and the free channels flash on the display.*
- 2. Press and hold down the **Channel Sensor** key for approx. 3 seconds.

PIN is displayed and the first number of the PIN flashes.

- 3. Set the first number of your PIN using the ▲-▼ keys (e.g. 9) and confirm by pressing the OK key.
- Change the second digit (e.g. 7) and the third digit (e.g. 3) in the same way as for the first digit.

When you have changed the PIN, the main level appears on the display again.

# 8.9 Operating the Sensors



After registering the receiver, each channel is assigned its own sensor (sensor 16 (M) was registered together with channel M). The sensors can also be assigned to the channels individually. This is useful, for example, if you want to control the entire irrigation system using a rain sensor or soil moisture sensor.

- 1. Press and hold down the **Channel Sensor** key for 2 seconds. **SENSOR** *is displayed, Channel* **1** *and* **CHANNEL** *flash on the display.*
- Select the channel using the ▲-▼ keys (e.g. channel *9*) and confirm by pressing the OK key.
   SENSOR and the arrow → next to sensor 1 (→ 1) flash on the display.



- Set the arrow → to the sensor you require (e.g. → 7 = sensor 7) using the ▲-▼ keys and assign the sensor to the channel (e.g. →■7) by pressing the OK key.
- Once you have assigned all the sensors you require (e.g. 1 and ■7), to the channel (e.g. channel 9) press the Menu+.

The display then changes to point 2 again and the channel and the sensors assigned to this channel are displayed.



# 8.10 Temperature Sensor

Each radio receiver is equipped with a temperature sensor in addition to the connected sensors. The temperature of the connected receiver is displayed in the main level.

- 1. Select the radio receiver In the main level using the ▲-▼ keys. **TEMP** is displayed and the arrows → flash next to the selected radio receiver.
- 2. Confirm by pressing **OK** (e.g. radio receiver  $\rightarrow$  6 to  $\rightarrow$  9).

The temperature is displayed as -- °C until the radio receiver has transferred the current temperature of the Central Radio Control Unit (e.g. **25** °C).



# 8.11 Channel and Sensor View

The main level can be displayed in the channel or sensor view.

- → Press the Channel Sensor key to change the view.
- a) Channel View:

**CHANNEL** and all channels that are switched on are displayed (e.g. channels 1, 3 and 7 are switched on  $\blacksquare 1$ ,  $\blacksquare 3$  and  $\blacksquare 7$ ).

b) Sensor View:

**SENSOR** and all sensors that are switched on are displayed, e. g. Soil Moisture Sensor = moist

(e.g. sensors 3 and 9 are switched on =  $\blacksquare$  3 and  $\blacksquare$  9).

31





man prog

38:88.

START- TIME SETUP AUTO

# 8.12 Testing the Receiver and Sensor Status

1. Press the **Test** key (e.g. using the tip of a ball-point pen).

**TEST** is displayed and  $\rightarrow$  flashes on the display in front of the first registered receiver. (The channels of the receiver flash until radio contact is established.)

 Select the receiver using the ▲-▼ keys (e.g. → 6 to → 9) and confirm by pressing the OK key.

#### The following Receiver stati are displayed:

- Radio signal strength (radio mast symbol, see 3. *Key Functions and Display*)
- Battery voltage (e.g. **58** = 5.8 V)
- (The battery should be replaced if the battery voltage is < 4.5 V.)
- Receiver temperature (e.g. 25 °C)
- Receiver number (e.g. 278)

#### The following sensor stati are displayed:

- Sensor connected and detects "moisture":
   symbol displayed
- (e.g. sensors 1 and  $4 = \blacksquare 1$  and  $\blacksquare 4$ )
- Sensor not connected : off (e.g. sensors 3, 6, 7 and 9 = 3, 6, 7 and 9)
- Only for Soil Moisture Sensor Art. 1187: connected and dry: ■ flashes (e.g. sensor 8 dry = ■ 8 flashes)

"Connected" and "dry" are not displayed with the Rain Sensor electronic Art. 1189 ( $\blacksquare$  off).

# 8.13 Reset



You can reset the Central Radio Control Unit in three ways:

- Connect to mains (when using unit for the first time)

   or –
- 2. Insert batteries in Central Radio Control Unit (when not connected to the mains)
  - or –
- Reset key (e.g. using the tip of a ball-point pen.) The unit can be reset from all operating levels by pressing the Reset key.
- All symbols appear on the display for 2 seconds.
- All programme data for all programmes is deleted.
- All receivers are cancelled.
- The manual run time is set to 30 minutes (**0:30**).
- The PIN number is reset to **000**.

The display then shows the time level.

**Tip:** If you have questions about operating and programming the Central Radio Control Unit, please do not hesitate to contact GARDENA Service.

# 9. Trouble-Shooting

| Fault  | Possible Cause   | Remedy   |  |  |  |
|--|--|--|--|--|--|
| Radio Receiver cannot be registered                        | The batteries are not installed correctly in the battery compart-<br>ment.                                     | → Install the batteries as de-<br>scribed in the Radio Re-<br>ceiver operating instructions                  |  |  |  |
| The unit reset itself                                      | A brief power cut occurred<br>while you were operating the<br>Central Radio Control Unit<br>without batteries. | → Install batteries (see<br>7.1 Putting Your Central<br>Radio Control Unit into<br>Operation).               |  |  |  |
| The active channels are not displayed                      | The Central Radio Control Unit displays the Sensor screen.   | → Change the Central Radio<br>Control Unit to the Channel<br>screen (see 8.11 Channel<br>and Sensor Screen). |  |  |  |
| No display   | Power pack not connected to mains.   | → Connect power pack to<br>mains.  |  |  |  |
|  | No battery fitted or battery flat.   | → Install battery (refer to<br>7.1. Putting the Central<br>Radio Control Unit into<br>Operation).            |  |  |  |
|  | Outside temperature below<br>- 10 °C or above + 50 °C.   | → Wait until outside tempera-<br>ture returns to operating<br>temperature range.                             |  |  |  |
| Battery flat after operating<br>Central Radio Control Unit | Batteries are not alkaline batteries.  | → Use 1.5-volt alkaline AA batteries.  |  |  |  |
| for short period of time                                   | Power pack not connected to mains.   | → Connect power pack to<br>mains.  |  |  |  |
| Error during data transfer                                 | Radio Receiver/Switch not<br>connected or not connected<br>correctly.  | → Connect Radio Receiver/<br>Switch correctly.   |  |  |  |
| ERROR flashes on the display (data transfer error)         | Poor radio reception.  | → Reduce distance to receiver.   |  |  |  |
| and channel flash on the display                           | Low battery power in Radio<br>Receiver.  | → Replace battery in Radio<br>Receiver.  |  |  |  |
|  | → Please also refer to the Trouble<br>Irrigation Valves and Radio Reference                                    | le-Shooting table for the eceivers.  |  |  |  |

If other faults occur, please contact GARDENA Customer Service.

# 10. Putting Out of Operation

| Wintering:                               | → Remove the valves from the valve boxes and store in a place<br>away from frost before the first frost sets in.  |
|--|---|
| Putting the System<br>out of Operation : | <ul> <li>→ Remove the batteries from the Radio Receivers and close the<br/>battery cover properly.<br/>This prevents water from penetrating the Radio Receivers.</li> </ul> |
| Important                                | Only dispose of batteries when flat.  |

→ Please dispose of used batteries properly at the appropriate communal waste disposal site.

# æ

# 11. Technical Data

| External power supply:                | power pack 12 V DC                               |
|---------------------------------------|--|
| Internal power supply:                | 4 x 1.5-volt alkaline AA batteries (max. 1 week) |
| Radio range (outside):                | up to 200 m                                      |
| Transmit/receive frequency:           | 433 MHz  |
| Transmitter power:                    | < 10 mW  |
| Operating temperature:                | from frost to + 50 °C                            |
| Storage temperature:                  | – 10 °C to + 60 °C                               |
| Air humidity:                         | 20% to 95% relative humidity                     |
| Receiver/sensor management:           | max. 16  |
| Programme saved when battery changed: | yes (EEPROM)                                     |

# 12. Service

Warrantv

GARDENA honours the guarantee legally required for this product (starting from the date of purchase). This guarantee covers all serious defects of the unit that can be proved to be material or manufacturing faults. Under warranty we will either replace the unit or repair it free of charge if the following conditions apply:

- The unit must have been handled properly and in keeping with the requirements of the operating instructions.
- Neither the purchaser or a non-authorised third party have attempted to repair the unit.
- · Faults which occur as a result of incorrectly installed or leaking batteries are not covered by the guarantee.

This manufacturer's guarantee does not affect the user's existing warranty claims against the dealer/seller.

If you have any problems with your Central Radio Control Unit, please contact our Customer Service or return the defective unit together with a short description of the problem directly to one of the GARDENA Service Centres listed on the back of this leaflet.

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 due to improper repair or if parts exchanged are not original GARDENA parts or parts approved by us, and, if the repairs were not carried out by a GARDENA Service Centre or an authorised specialist. The same applies to spare parts and accessories.

# EU Certificate of Conformity

The undersigned GARDENA Kress + Kastner GmbH · Hans-Lorenser-Str. 40 · D-89079 Ulm hereby certifies that, when leaving our factory, the unit indicated below is in accordance with the harmonised EU guidelines. EU standards of safety and product specific standards. This certificate becomes void if the unit is modified without our approval.

Ulm, 15.06.2000

Description of the unit: Central Radio Control Unit Art. No.: 1243 EU directives: Electromagnetic Compatibility 89/336/EC Low Voltage Directive 73/23/EC Directive 93/68/EC Harmonised European standards: Year of CE marking:

ETS 300683:1997: EN 60730-1:1996 2000

Thomas Heinl Technical dept. manager

| Receiver | Channels | PROG | START-TIME | RUN-TIME | 3rd | 2nd | Мо | Tu | We | Th | Fr | Sa | Su | Sensors |
|----------|----------|------|------------|----------|-----|-----|----|----|----|----|----|----|----|---------|
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |         |

| Receiver | Channels | PROG | START-TIME | RUN-TIME | 3rd | 2nd | Мо | Tu | We | Th | Fr | Sa | Su | Sensor |
|----------|----------|------|------------|----------|-----|-----|----|----|----|----|----|----|----|--------|
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |
|          |          |      |            |          |     |     |    |    |    |    |    |    |    |        |

#### Deutschland

GARDENA Kress + Kastner GmbH GARDENA Service Hans-Lorenser-Straße 40 D-89079 Ulm Produktfragen: (07 31) 490-123 Reparaturen: (07 31) 490-290

#### Argentina

Argensem S.A. Venezuela 1075 (1618) El Talar - Buenos Aires

#### Australia NYLEX Corporation Ltd.

25-29 Nepean Highway P.O. Box 68 Mentone, Victoria 3194

#### Austria

GARDENA Österreich Ges. m.b.H. Stettnerweg 11-15 2100 Korneuburg

#### Belgium

MARKT (Belgium) NV/SA Sterrebeekstraat 163 1930 Zaventem

#### Brazil

M. Cassab Av. das Nações Unidas, 20.882 Santo Amaro, CEP 04795-000 São Paulo - S.P.

Bulgaria / България ДЕНЕКС ООД бул. "Черни връх" 43 София 1407

#### Canada

GARDENA Canada Ltd. 100, Summerlea Road Brampton, Ontario Canada L6T 4X3

#### Chile

Antonio Martinic Y CIA. LTDA. Gilberto Fuenzalida 185 Loc. Las Condes - Santiago de Chile

#### Costa Rica

Compania Exim Euroiberoamericana S.A. 350 Sur del Automercado Los Yoses San Pedro

#### Cyprus FARMOKIPIKI LTD P.O. Box 7098 74, Digeni Akrita Ave.

1641 Nicosia **Czech Republic** GARDENA spol. s.r.o. Ripská 20 62700 Brno

Denmark GARDENA Danmark A/S Naverland 8 2600 Glostrup

#### Finland

Habitec Oy Martinkyläntie 52 01720 Vantaa

#### France

GARDENA France Service Après-Vente BP 50080 95948 ROISSY CDG Cedex

#### Great Britain

GARDENA UK Ltd. 27-28 Brenkley Way Blezard Business Park Seaton Burn Newcastle upon Tyne NE13 6DS

#### Greece

Agrokip G. Psomadopoulos & Co. 20, Lykourgou str. Kallithea - Athens

#### Hungary

GARDENA Magyarország Kft. Késmárk utca 22 1158 Budapest

# Iceland

Heimilistaeki hf Saetun 8 P.O. Box 5340 125 Reykjavik

> Republic of Ireland Michael McLoughlin & Sons Hardware Limited Long Mile Road Dublin 12

# Italy

GARDENA Italia S.r.l. Via Donizetti 22 20020 Lainate (Mi)

# Japan

KAKUDAI Mfg. Co. Ltd. 1-4-4, Itachibori Nishi-ku Osaka 550

#### Luxembourg Magasins Jules Neuberg Grand Rue 30 Case Postale No. 12 Luxembourg 2010

Netherlands MARKT (Holland) BV Postbus 219

1380 AE Weesp Neth. Antilles

#### Jonka Enterprises N.V. Sta. Rosa Weg 196 P.O. Box 8200 Curaçao

New Zealand NYLEX New Zealand Limited Private Bag 94001 South Auckland Mail Centre 10 Offenhauser Drive East Tamaki, Manukau

#### Norway

GARDÉNA Norge A/S Postboks 214 2013 Skietten

#### Poland

GARDENA Polska Sp. z o.o. Szymanów 9 d 05-532 Baniocha

#### Portugal

MARKT (Portugal), Lda. Recta da Granja do Marquês Edif. GARDENA Algueirão 2725-596 Mem Martins

#### Russia / Россия АО АМИДА ТТЦ

ул. Мосфилмовская 66 117330 Москва

#### Singapore

Variware Holland Road Shopping Centre 227-A 1st Fl., Unit 29 Holland Avenue Singapore 1027

#### Slowenia / Croatia

Silk d.o.o. Trgovina Brodišče 15 1236 Trzin

#### South Africa GARDENA South Africa (Pty.) Ltd.

P.O. Box 11534 Vorna Valley 1686

## Spain

ANMI Andreu y Miriam S.A. Calle Pere IV, 111 08018 Barcelona

### Sweden

GARDENA Svenska AB Box 9003 20039 Malmö

Switzerland GARDENA Kress + Kastner AG Bitziberg 1 8184 Bachenbülach

# Ukraine / Украина

АОЗТ АЛЬЦЁСТ ул. Гайдара 50 г. Киев 01033

#### Turkey

Dost Diş Ticaret Mümessillik A.Ş. Yeşilbağlar Mah. Başkent Cad. No. 26 Pendik - İstanbul

#### USA

GARDENA 3085 Shawnee Drive Winchester, VA 22604

1243-23.960.03/0011 GARDENA Kress + Kastner GmbH Postfach 27 47, D-89070 Ulm http://www.gardena.de

Download from Www.Somanuals.com. All Manuals Search And Download.

Free Manuals Download Website <u>http://myh66.com</u> <u>http://usermanuals.us</u> <u>http://www.somanuals.com</u> <u>http://www.4manuals.cc</u> <u>http://www.4manuals.cc</u> <u>http://www.4manuals.cc</u> <u>http://www.4manuals.com</u> <u>http://www.404manual.com</u> <u>http://www.luxmanual.com</u> <u>http://aubethermostatmanual.com</u> Golf course search by state

http://golfingnear.com Email search by domain

http://emailbydomain.com Auto manuals search

http://auto.somanuals.com TV manuals search

http://tv.somanuals.com