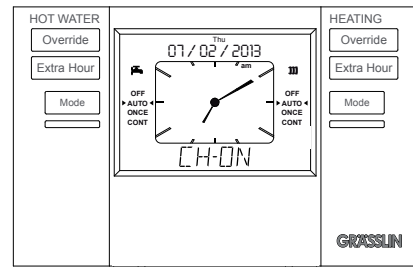


QEG-2
QEG-2S

EN Operating Manual



Grässlin GmbH

Bundesstraße 36
D-78112 St. Georgen
Germany
Phone: +49 7724 933-0
Fax: +49 7724 933-240
www.graesslin.de
info@graesslin.de

80.10.1352.7/12/13/02

More information on our web page:
<http://qeg.graesslin.de/qrcode/im/qeg2/>



Safety Instructions



Danger! Risk of electric shock!

Installation must be carried out by a professional electrician!

- To avoid injuries, the device must be installed by a skilled electrician only!
- Before changing the battery, the device must be disconnected from the power supply!
- Please observe the national regulations and safety instructions.
- Interferences and changes to the device will invalidate the warranty and guarantee rights.
- Maximum diameter of the conductors lines for the terminals: 2 x 2,5 mm²

The time on the programmer must be correct. Some types have to be adjusted in spring and autumn at the changes between Greenwich Mean Time and British Summer Time.

You may be able to temporarily adjust the heating programme, for example, 'Override', 'Advance', or 'Boost'. These are explained in the manufacturer's instructions.

The heating will not work if the room thermostat has switched the heating off. And, if you have a hot-water cylinder, the water heating will not work if the cylinder thermostat detects that the hot water has reached the correct temperature.

Description of the device

Your two channel programmer provides timing control for your central heating and domestic hot water, letting you set ON and OFF periods to suit your own lifestyle.

- Backlit LCD Display
- Real Time Clock
- Up to 3 ON/OFF per day
- Automatic summertime / wintertime changeover
- Daily, weekly ¹⁾ and week-weekend ¹⁾ programming possibility
- Different running modes: OFF, AUTO, ONCE, CONTINUOUS and HOLIDAYS ¹⁾
- Manual override function
- Manual extra hour function
- 3 different pre-programmed profiles, customizable by user
- Boiler service interval indication & actions ¹⁾

Designated use

- The programmer is used to control central heating zone systems or combi boilers and domestic hot water systems ("fully pumped" or "gravity-fed").
- Suitable for use in dry rooms only!
- Do not install in the vicinity of devices which generate inductive discharges (motors, transformers, etc.)

Technical data

Dimensions H x W x D (mm) 95 x 148 x 36
 Weight g (approx.) 285
 Power supply 230 V AC / 50-60 Hz
 Power consumption < 3 W
 Power reserve > 2h
 Switching capacity 3 A 250 V ~ resistive, cos φ = 1
 3 A 250 V ~ inductive, cos φ = 0.6
 24 h or 12 h AM/PM format

Time display 1 min.
 Time setting resolution 1 min.
 – Time of day
 – Programmes / min. switching
 Programmes Selectable (daily , weekly, or week-weekend)

Number of switchings per day 3 ON/OFF pairs (2 ON/OFF pairs selectable)

Operating temperature range 0°C ... + 45°C
 Ambient temperature -20°C ... + 55°C
 Humidity range 10 to 90% RH, non condensing
 Accuracy Type ± 1 sec./day at +20°C
 Terminal capacity 2 x 2,5 mm²
 Protection type IP 30
 European standards EN60730-2-7
 Compliant with building regulations (Part L UK) (Part J Scotland)



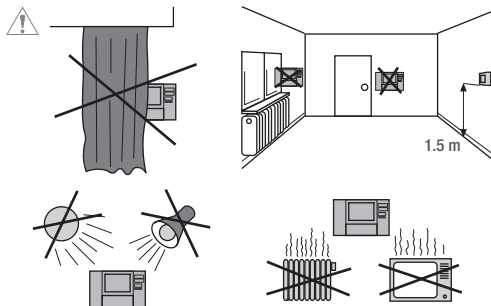
Installation and mounting



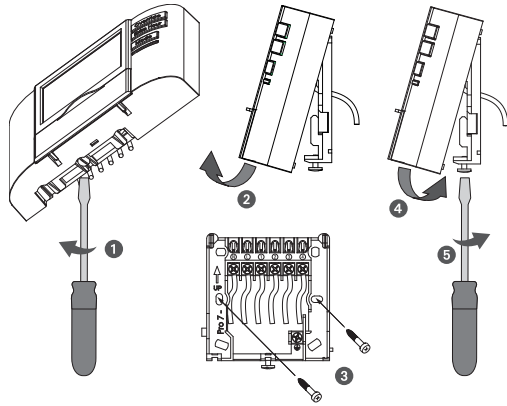
Danger! Risk of electric shock!

Installation must be carried out by a professional electrician!

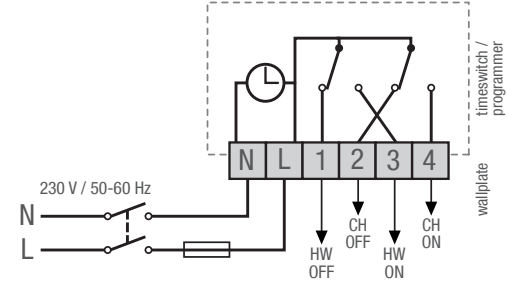
General information



Open/Close housing, Wall mounting



Wiring diagram



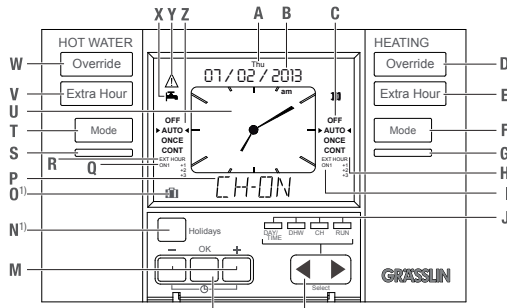
Quick-start guide – 3 clicks to total control

- Connect mains power.
- Press **OK** three times.
 - The default Standard in-built programme runs.
 - You can control the QEG with the Override, Extra Hour or Mode buttons.

Please read the full instructions if you want to know more.

Operation and configuration

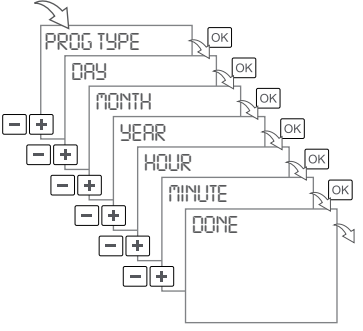
Display / Function keys



- A** Day of the week indicator
- B** Current day, month, year
- C** Central heating operating mode indicator
- D** Central heating override button
- E** Central heating extra hour button
- F** Central heating operating mode button
- G** Central heating indicator lamp
- H** Central heating extra hour indication
- I** Central heating programming period indication
- J** Select indicator lamps
- K** Select
- L** OK button
- M** '+' and '-' button
- N¹⁾** Holiday button
- O¹⁾** Holiday icon
- P** Information text line
- Q** Domestic hot water programming period indication
- R** Domestic hot water extra hour indication
- S** Domestic hot water indicator lamp
- T** Domestic hot water operating mode button
- U** Analog clock / current time
- V** Domestic hot water extra hour button
- W** Domestic hot water override button
- X** Domestic hot water icon
- Y** Warning icon
- Z** Domestic hot water operating mode indicator

Commissioning

When first using the timer, you have to set programming type, date and time.



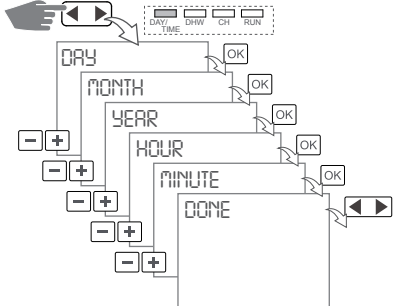
- Connect the programmer to power.
 - Product name and version number are displayed briefly.
 - The preset **PROGRAMMING TYPE** and **OK** are flashing.

Depending on the product you can choose between three different settings: Daily, Weekly ¹⁾ or Week-Weekend ¹⁾.

- Daily** All days (Monday - Sunday) are programmed with the same ON/OFF time schedule
 - Weekly ¹⁾** You can program each day (Monday, Tuesday, ...) with a different ON/OFF time schedule
 - Week-Weekend ¹⁾** You can program Monday - Friday with a ON/OFF time schedule and Saturday - Sunday with a different one.
- Choose your desired programming type (DAILY, WEEKLY ¹⁾, WEEK-WEEKEND ¹⁾, [] or [+], and confirm with [OK].
 - Preset value **DATE** is flashing.
 - Enter day, [] or [+], and confirm with [OK].
 - Preset value **MONTH** is flashing.
 - Enter month, [] or [+], and confirm with [OK].
 - Preset value **YEAR** is flashing.
 - Enter year, [] or [+], and confirm with [OK].
 - Preset **TIME** is flashing.
 - Enter hour, [] or [+], and confirm with [OK].
 - Preset value **MINUTE** is flashing.
 - Enter minute, [] or [+], and confirm with [OK].
 - The date and time are saved.
 - The programmer goes to **RUN** mode.

Set date and time

If you wish to change the date or time, follow the instructions below:

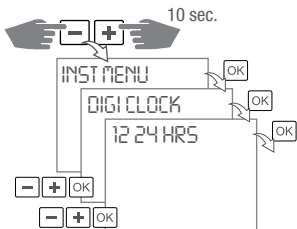


- Press the **SELECT** [] until menu **DAY/TIME** is selected.
 - Select indicator lamp **DAY/TIME** is ON.
- Enter day, [] or [+], and confirm with [OK].
 - Preset value **MONTH** is flashing.
- Enter month, [] or [+], and confirm with [OK].
 - Preset value **YEAR** is flashing.
- Enter year, [] or [+], and confirm with [OK].
 - Preset **TIME** is displayed.
- Enter hour, [] or [+], and confirm with [OK].
 - Preset value **MINUTE** is flashing.
- Enter minute, [] or [+], and confirm with [OK].
 - The date and time are saved.
- Press the **SELECT** [] until indicator lamp **RUN** is ON.

Change AM/PM time display to 24 hour clock

Your programmer can operate on the 12 hour AM/PM or 24 hour clock formats.

If you wish to change the clock format, follow the instructions below:



- Make sure the device is working in **RUN** mode.
- Press and hold [] [+] buttons at the same time for 10 seconds.
 - INST MENU** opens and **OK** is flashing.
- Confirm with [OK].
 - The menu item **DIGI CLOCK** is displayed.
- Press [] to edit settings.
 - Setting **NO** is flashing.
- Press [] or [+] to scroll through the menu. Choose **YES** and confirm with [OK].
 - Setting **AM PM** is flashing.
- Press [] or [+] to scroll through the menu. Choose **AM PM** or **24 HRS** and confirm with [OK].
 - The chosen setting is saved.
 - The next menu item **BACKLIGHT** is displayed.
- To save your settings, continue scrolling through the menu options with [] key, until you once again see **INST MENU / – OK +**, and finally leave the installers menu with [] key. With QEG-2S, continue scrolling through the menu options with [] key, until you see **CHANGE PIN / – OK +**, and finally leave the installers menu with [] key.

Running a built-in programme (default programmes)

With the date and time correct, your timer will now be operating to the built-in programmes. These have been designed to provide heating at typical times throughout the day.

The built-in programmes give you a starting point that you can personalise to your own requirements, please see the section "Review/Edit central heating program" or "Review/Edit domestic hot water program".

Built-in programme STD (DEFAULT)

Daily ON1: 06:30 am ON2: 12:00 pm* ON3: 04:30 pm
 OFF1: 08:30 am OFF2: 12:00 pm* OFF3: 10:30 pm

Weekly ¹⁾ ON1: 06:30 am ON2: 12:00 pm ON3: 04:30 pm
 OFF1: 08:30 am OFF2: 01:00 pm OFF3: 10:30 pm

Week- Weekend ¹⁾ ON1: 06:30 am ON2: 12:00 pm ON3: 04:30 pm Mo - Fr
 OFF1: 08:30 am OFF2: 01:00 pm OFF3: 10:30 pm Sa - Su

Built-in programme HOME

Daily ON1: 06:30 am ON2: 12:00 pm* ON3: 04:00 pm
 OFF1: 09:30 am OFF2: 12:00 pm* OFF3: 11:00 pm

Weekly ¹⁾ ON1: 06:30 am ON2: 12:00 pm ON3: 04:00 pm
 OFF1: 09:30 am OFF2: 01:00 pm OFF3: 11:00 pm

Week- Weekend ¹⁾ ON1: 06:30 am ON2: 12:00 pm ON3: 04:30 pm Mo - Fr
 OFF1: 09:30 am OFF2: 01:00 pm OFF3: 11:00 pm Sa - Su

Built-in programme ECO

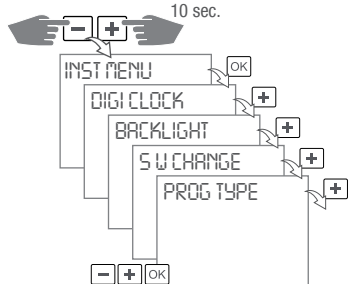
Daily ON1: 06:30 am ON2: 12:00 pm* ON3: 05:30 pm
 OFF1: 07:30 am OFF2: 12:00 pm* OFF3: 10:00 pm

Weekly ¹⁾ ON1: 08:30 am ON2: 12:00 pm ON3: 05:30 pm
 OFF1: 09:30 am OFF2: 01:00 pm OFF3: 10:00 pm

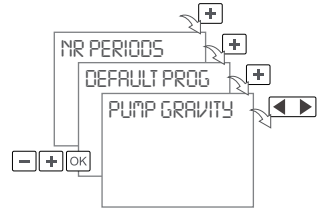
Week- Weekend ¹⁾ ON1: 06:30 am ON2: 12:00 pm ON3: 05:30 pm Mo - Fr
 OFF1: 07:30 am OFF2: 12:00 pm OFF3: 10:00 pm Sa - Su

* On/off programmes with the same time cancel out - no switching will occur.

The built-in programmes can be selected in the **INSTALLERS MENU**. To access to installers menu, the device must be working in **RUN** mode.



- Make sure the device is working in **RUN** mode.
- Press and hold [] [+] buttons at the same time for 10 seconds.
 - INST MENU** opens and **OK** is flashing.
- Confirm with [OK].
 - Installers menu is activated.
- Press 6 x [+] until **PUMP GRAVITY** is displayed.
 - Press [] to edit settings.
 - Preset value is flashing.
- Press [] or [+] to scroll through the menu. Choose your desired setting (PUMPED OR GRAVITY) and confirm with [OK].
 - The chosen setting is saved.
 - The next menu item **RESET** is displayed.
- To save your settings, continue scrolling through the menu options with [] key, until you once again see **INST MENU / – OK +**, and finally leave the installers menu with [] key. With QEG-2S, continue scrolling through the menu options with [] key, until you see **CHANGE PIN / – OK +**, and finally leave the installers menu with [] key.



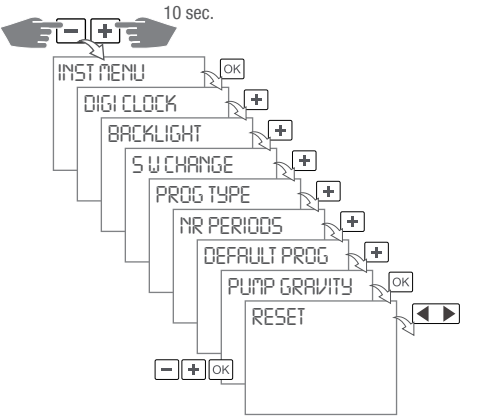
- Press [+] to go to **DEFAULT PROG**.
- Press [] to edit settings.
 - Preset value is flashing.
- Press [] or [+] to scroll through the menu. Choose your desired setting (STD, HOME or ECO) and confirm with [OK].
 - The chosen setting is saved
 - The next menu item **PUMP GRAVITY** is displayed.
- To save your settings, continue scrolling through the menu options with [] key, until you once again see **INST MENU / – OK +**, and finally leave the installers menu with [] key. With QEG-2S, continue scrolling through the menu options with [] key, until you see **CHANGE PIN / – OK +**, and finally leave the installers menu with [] key.

Domestic hot water systems ¹⁾
– "fully pumped system" or "gravity-fed system"

Fully pumped Domestic Hot Water system (PUMPED)
 The term for any boiler that uses a pump to move all the heat from the boiler to every part of the system is "fully pumped". As a rule one pump is used to circulate the water through valves which divert the flow to the relevant part of the system (Central heating or Domestic Hot water). In this type of systems, both channels of the programmer can work independently.

Gravity-fed Domestic Hot Water system (GRAVITY)
 In gravity fed hot water systems, whenever the boiler comes on to service heating, there will inevitably be some circulation through the hot water storage tank, which will then heat up. Then there is no possibility to have independent programs for heating and hot water.

You can choose the desired system in the **INSTALLERS MENU**. To access to installers menu, the device must be working in **RUN** mode.



- Make sure the device is working in **RUN** mode.
- Press and hold [] [+] buttons at the same time for 10 seconds.
 - INST MENU** opens and **OK** is flashing.
- Confirm with [OK].
 - Installers menu is activated.
- Press 6 x [+] until **PUMP GRAVITY** is displayed.
 - Press [] to edit settings.
 - Preset value is flashing.
- Press [] or [+] to scroll through the menu. Choose your desired setting (PUMPED OR GRAVITY) and confirm with [OK].
 - The chosen setting is saved.
 - The next menu item **RESET** is displayed.
- To save your settings, continue scrolling through the menu options with [] key, until you once again see **INST MENU / – OK +**, and finally leave the installers menu with [] key. With QEG-2S, continue scrolling through the menu options with [] key, until you see **CHANGE PIN / – OK +**, and finally leave the installers menu with [] key.

¹⁾ Function not available for all products.

