Drayton
by Schneider Electric

LP20

Dual Channel Programmer

Part number 25039DR

⚠️ For GREENSTAR CDi, GREENSTAR i JUNIOR and GREENSTAR Si MODELS also GREENSTAR i SYSTEM and GREENSTAR CDi SYSTEM MODEL (only when used with the optional integral diverter).

Installation & User Guide

Support

Drayton

401 Southway Drive
Plymouth
PL6 6QT
United Kingdom

Technical: +44(0)333 7000 622
customer.care@draytoncontrols.co.uk
www.draytoncontrols.co.uk

🐦 @DraytonHeating
▶ /DraytonControls

⚠️ **PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE STARTING.**

These instructions are applicable to the Drayton model(s) stated on the front cover of this manual only and must not be used with any other make or model.

These instructions apply in the UK only and should be followed except for any statutory obligation.

If you are in any doubt contact the Drayton technical helpline.

This accessory must be fitted by a competent person. Failure to comply could lead to prosecution.

Leave these instructions with the user or at the appliance.

Symbols

🌡 Central Heating

🚰 Domestic Hot Water

Abbreviations

CH	=	Central Heating
DHW	=	Domestic Hot Water
DLS	=	Daylight Saving
BST	=	British Summer Time
GMT	=	Greenwich Mean Time
C	=	Celsius (Centigrade)
IP	=	Ingress Protection
V	=	Volt
m	=	metre
mA	=	milliAmpere

Definitions (DLS/BST)

Summer time begins: Last Sunday in March at 1:00 am GMT (Clocks are put forward by 1 hour)

Summer time ends: Last Sunday in October at 2:00 am BST (Clocks are put back by 1 hour)

Protect your environment

Proper battery recycling

Electronic devices and batteries, rechargeable or not, should not be disposed of into ordinary household waste. Instead, they must be recycled properly to protect the environment and cut down the waste of precious resources. Your local waste management authority can supply details concerning the proper disposal of batteries.

Table of contents

Technical Data

	LP20
Electrical supply	24v DC ‹65mA
Ambient operating temperature	0°C to +50°C
Humidity operating range	30 - 95% non-condensing up to 45°C
Class of protection	II
Degree of protection	IP20
Accuracy @ 25°C	‹±I sec/day
Battery life	I0 years
Battery backup time & date	I0 years min.
Shortest switching period	I minute
DHW & CH On/Off periods	3
DHW & CH Programs	7 days
Pollution Class	2
Software Class	A
Ball pressure test	90°C

Relevant EC Directives:

20I4/35/EC Low Voltage Directive
20I4/30/EC Electromagnetic Compatibility Directive
I999/5/EC R&TTE Directive
2006/66/EC Battery Directive
20II/65/EU RoHS Directive

Applied Standards:

EN60730-I; EN60730-2-7

Pack Contents:

Programmer
Instructions

Specifications:

- Dual channel programmer for CH & DHW mounted into the boiler fascia
- 7 day programmer
- 3 on/off periods per day
- Automatic BST settings
- Pre-programmed on/off periods
- Dedicated advance buttons
- I2 or 24 hour back-lit digital display
- Holiday function
- Pre-wired with PCB connector

0655084001ISSC

Installation Guide

LP20

LP20 Installation

⚡ **DANGER:**
230 volts do not touch the electrical components or circuits.
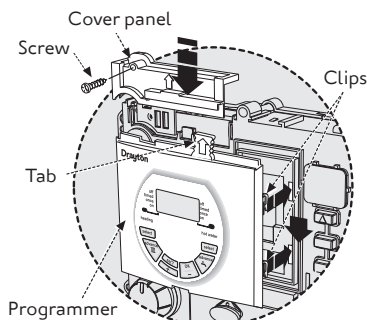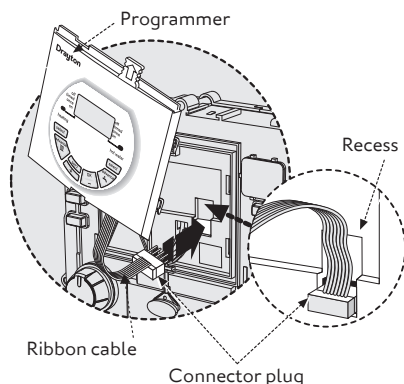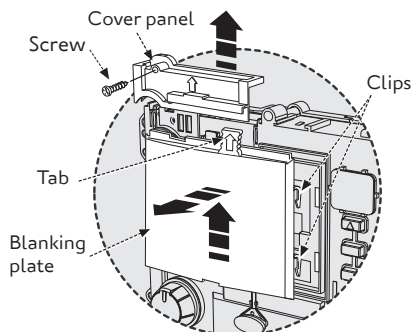
⚠ **CAUTION:**
Isolate the mains electricity supply before starting any work and observe all relevant safety precautions.

Observe electro-static discharge precautions: do not touch the pcb circuit.

✏ **NOTE:**
This accessory must be fitted by a competent person. Failure to comply could lead to prosecution.

1. Remove the boiler outer casing and control panel fascia to gain access to the boiler control panel.

2. Release the securing screws.

3. Pull the cover panel up to remove.

4. Grip the tab and pull upwards to disengage clips, pull forward to remove blanking plate or existing programmer.

5. Align the connector plug pins into socket on the PCB and push fully home.

6. Feed the ribbon cable into the recess.

7. Align the programmer and locate the clips, push into the slots then down to secure.

8. Locate the cover panel in place and secure with the screw.

9. Replace fascia cover and outer casing before switching on the electrical supply and boiler.

10. Switch boiler on when completed.

Cover panel
Screw
Clips
Tab
Blanking plate

Programmer
Recess
Ribbon cable
Connector plug

Cover panel
Screw
Clips
Tab
Programmer

User Guide

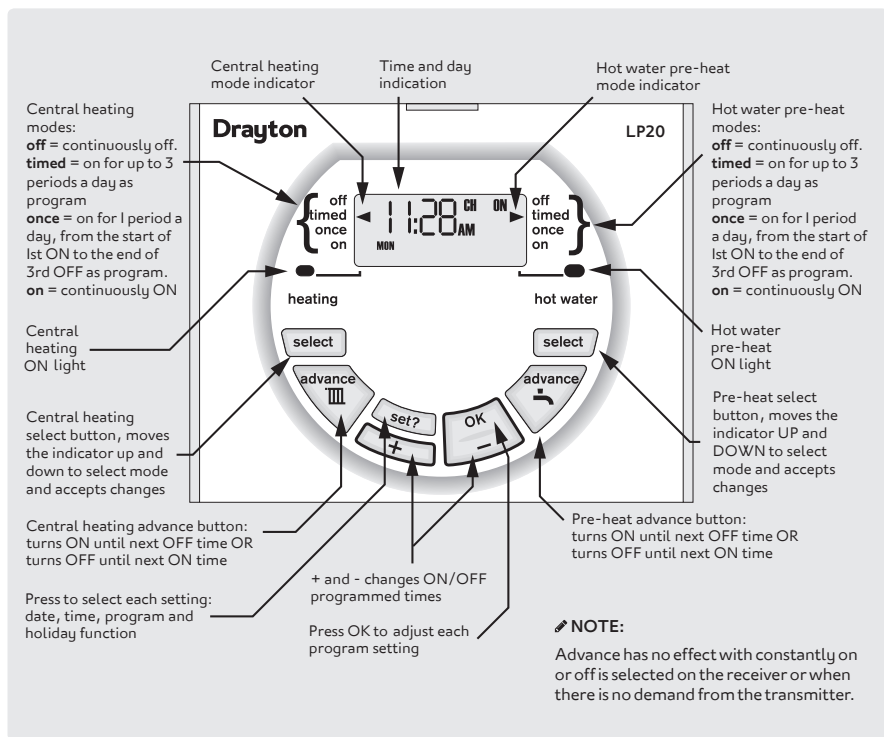**LP20**

LP20 Programmer

If the engineer has set your program and timings – you do not need to do anything else. Just keep this guide in a safe place for future reference.
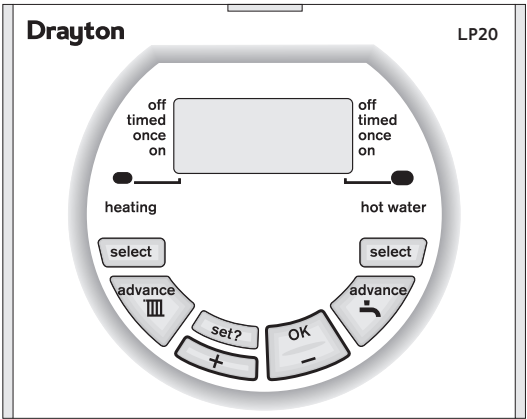
Introduction

The programmer will automatically switch your central heating and hot water on and off at times that suit you.

The green light on the front of the programmer shows when each one is on. LP20RF has a 7-day program allowing for different timings on each day of the week, with central heating and hot water working independently for up to 3 heating periods each day.

If the engineer hasn't set your timings for you, your programmer will work with a standard program that has been set at the factory. If this doesn't suit you, it's very easy to change it.

Central heating mode indicator

Time and day indication

Hot water pre-heat mode indicator

Central heating modes:
off = continuously off.
timed = on for up to 3 periods a day as program
once = on for I period a day, from the start of Ist ON to the end of 3rd OFF as program.
on = continuously ON

Hot water pre-heat modes:
off = continuously off.
timed = on for up to 3 periods a day as program
once = on for I period a day, from the start of Ist ON to the end of 3rd OFF as program.
on = continuously ON

Drayton

LP20

off
timed
once
on

CH
ON

11:28 AM

MON

off
timed
once
on

heating

hot water

Central heating ON light

select

select

Hot water pre-heat ON light

advance

advance

Central heating select button, moves the indicator up and down to select mode and accepts changes

set?

OK

+

_

Pre-heat select button, moves the indicator UP and DOWN to select mode and accepts changes

Central heating advance button: turns ON until next OFF time OR turns OFF until next ON time

Pre-heat advance button: turns ON until next OFF time OR turns OFF until next ON time

Press to select each setting: date, time, program and holiday function

+ and - changes ON/OFF programmed times

Press OK to adjust each program setting

NOTE:

Advance has no effect with constantly on or off is selected on the receiver or when there is no demand from the transmitter.

The Standard Program

NOTE:

The ON/OFF periods pre-programmed for Central Heating and Hot Water pre-heat are shown in the table below. These factory installed settings can be used without any further programming of the receiver. The time and date are pre-programmed and should not require adjustment.

If you need to restore the factory pre-set program times then:

Press the + and - buttons together, for three seconds or longer, to restore the default program times to those shown in the table opposite.

NOTE:

Two ON/OFF periods can be used instead of three, by setting the second ON/OFF periods to 12:00 as shown in the default program table. One ON/OFF period can be achieved by setting the second and third ON/OFF periods to the same times.

See **Changing the Program** on the next page, if changes are required to the clock time or pre-programmed settings.

Switching	Weekdays		Weekends	
	HW	CH	HW	CH
1st ON - start of first timed period	6.30am	6.30am	7.00am	7.00am
1st OFF - end of first timed period	8.30am	8.30am	9.00am	9.00am
2nd ON - start of second timed period	12.00pm	12.00pm	12.00pm	12.00pm
2nd OFF - end of second timed period	12.00pm	12.00pm	12.00pm	12.00pm
3rd ON - start of third timed period	4.30pm	4.30pm	4.00pm	4.00pm
3rd OFF - final swith-off of the day	10.30pm	10.30pm	11.00pm	11.00pm

06515084001SSC

Changing the Program

Setting Central Heating (CH) MON - FRI

1. Press **set?** until SET and PROG? are shown in the display.

```
5Et
PROG?
```

2. Press **OK** to enter program.

3. Press **OK** to select MON-FRI.

```
5Et
MON TUE WED THU FRI
PROG?
```

4. Press **OK** to select CH.

```
5Et          CH
MON TUE WED THU FRI
PROG?
```

> ✎ **NOTE:**
> Speed up the display by holding down the **+** or **-** buttons.

5. Press + or - to change the ON time.

```
6:30        CH  ON
MON TUE WED THU FRI
PROG
```

6. Press **set?** to set the ON time and select the OFF time.

```
8:30        CH
MON TUE WED THU FRI    OFF
PROG
```

7. Press + or - to change the OFF time.

8. Press **set?** to set the OFF time and select the next ON time.

Repeat operations 5 to 8 to set the second and third CH ON/OFF times.

> ✎ **NOTE:**
> After pressing **set?** for the third CH OFF time the display shows SET MON ...see next page.

Setting Hot Water (HW) MON - FRI

9. Press OK to select the first ON time.

```
5Et          HW
MON TUE WED THU FRI
PROG?
```

Repeat operations 5 to 8 to set the first, second and third HW ON/OFF times.

```
6:30        HW  ON
MON TUE WED THU FRI
PROG
```

> ✎ **NOTE:**
> After pressing **set?** for the third HW OFF time the display shows SET MON ...see next page.

Setting individual weekdays:

> ✏ **NOTE:**
>
> If you do not require individual weekday times, then press **set?** until SET SAT-SUN are displayed and continue on the next page.
>
> If you do not wish to change the setting for the day displayed, then press **set?** until the first day you want to change is displayed.

Setting Central Heating (CH) individual weekdays:

1. Press OK to select weekday.

2. Press OK to select CH.

> ✏ **NOTE:**
>
> Speed up the display by holding down the **+** or **-** buttons.

3. Press + or - to change the ON time.

4. Press **set?** to set the ON time and select the OFF time.

5. Press + or - to change the OFF time.

6. Press **set?** to set the OFF time and select the next ON time.

Repeat operations 3 to 6 to set the second and third ON/OFF times.

> ✏ **NOTE:**
>
> After pressing **set?** for the third CH OFF time, SET and HW for that weekday are displayed.

Setting Hot Water (HW) individual weekdays:

7. Press OK to select the first ON time.

Repeat operations 3 to 6 to set the first, second and third HW ON/OFF times.

> ✏ **NOTE:**
>
> After pressing **set?** for the third HW OFF time, SET and the next weekday are displayed.... after completing the steps above for FRI the display shows SET SAT-SUN. see next page....

Setting Central Heating (CH) SAT - SUN:

1. Press OK to select weekend.

2. Press OK to select CH.

```
5Et  CH
        SAT SUN
   PROG?
```

> ✏ **NOTE:**
>
> Speed up the display by holding down the **+** or **-** buttons.

3. Press + or - to change the ON time.

```
7:00  CH  ON
          SAT SUN
   PROG
```

4. Press **set?** to set the ON time and select the OFF time.

```
9:00  CH
          OFF
      SAT SUN
   PROG
```

5. Press + or - to change the OFF time.

6. Press **set?** to set the OFF time and select the next ON time.

Repeat operations 3 to 6 to set the second and third ON/OFF times.

> ✏ **NOTE:**
>
> After pressing **set?** for the third CH OFF time, SET and HW for the weekend are displayed.

Setting Hot Water (HW) SAT - SUN:

7. Press OK to select the first ON time.

```
5Et  HW
   PROG?
```

Repeat operations 3 to 6 to set the first, second and third HW ON/OFF times.

```
9:00  HW  ON
   PROG
```

> ✏ **NOTE:**
>
> After pressing **set?** for the third HW OFF time, SET and SAT are displayed....see next page.

> ✏ **NOTE:**
>
> If you do not require individual weekend day times, then press **set?** until the normal display is shown.

Setting individual weekend days:

> ✏ **NOTE:**
> If you do not require individual weekend day times, then press **set?** until the normal display is shown.

If you do not wish to change the settings for SAT, then press set? to move to SUN.

```
5Et
        SAT SUN
PROG?
```

Setting Central Heating (CH) individual weekend days:

1. Press OK to select the day displayed.

2. Press OK to select CH.

```
5Et   CH
PROG?
```

3. Press + or - to change the ON time.

```
7:00  CH  ON
        SAT
PROG
```

4. Press **set?** to set the ON time and select the OFF time.

```
9:00  CH
          OFF
PROG
```

5. Press + or - to change the OFF time.

6. Press **set?** to set the OFF time and select the next ON time.

Repeat operations 3 to 6 to set the second and third ON/OFF times.

> ✏ **NOTE:**
> After pressing **set?** for the third CH OFF time, SET and HW for that day are displayed.

Setting Hot Water (HW) individual weekend days:

7. Press OK to select the   first ON time.

```
5Et   HW
        SAT
PROG?
```

Repeat operations 3 to 6 to set the   first, second and third HW ON/OFF times. Pressing **set?** until the normal display is shown.

```
7:00  HW  ON
        SUN
PROG
```

> ✏ **NOTE:**
> Speed up the display by holding down the **+** or **-** buttons.

Setting holidays:

1. Press the **set?** button until SET and HDAY? are displayed.

```
 SEt
        HDAY?
```

2. Press OK and the display shows 00.

```
 00
```

3. Press + or - to set the number of days you require the system to be off.

```
 03
```

4. Press **set?** then HDAY is shown in the display and no demand for heating will be made from the programmer. The program will return to normal after the set number of days. To cancel the holiday setting and return to normal operation, press any button.

```
               HDAY
```
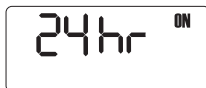
> ✏ **NOTE:**
> The programmer counts each pass through midnight as a day. e.g. if you do not want heating from Saturday morning until Tuesday morning, set for three days.

Setting the clock and time

1. Press the **set?** button until SET and CLOCK? are shown in the display.

```
 SEt
  CLOCK?
```

2. Press OK to display 24hr and ON.

```
 24hr    ON
```

3. Press + to switch between 24hr and 12hr display.

4. Decide between 24 hour or 12 hour display and press set? to select, now the hours will flash.

5. Press + or - to set the correct hour.

```
 12:00
```

> ✏ **NOTE:**
> Speed up the display by holding down the **+** or **-** buttons.

6. When the correct hour has been selected, press set? to select, now the minutes will flash.

```
 10:00
```

7. Press + or - to set the correct minutes.

8. When the correct minutes have been set, press **set?** to select that setting.

- Now SET and DATE will be displayed.
- If the day and date needs resetting, refer to the next page for SETTING THE DATE.
- If the day and date are correct, press **set?** to return to the normal display.

```
 SEt
         DATE?
```

Setting the date:

1. Press the **set?** button until SET and DATE? are displayed.

> **SEt**
> DATE?

2. Press the OK button once, the year flashes on the display.

> **Y:07**
> DATE

3. Press + or - to set the correct year, e.g. 04.

> **Y:04**
> DATE

4. When the correct year has been chosen, press **set?** to select, now the month will flash.

> **∏:08**
> DATE

5. Press + or - to select the correct month, e.g. 08.

6. When the correct month has been chosen, press **set?** to select, now the day will flash.

> **d:16**
> DATE

7. Press + or - to select the correct day, e.g. 16.

8. When the correct day has been chosen, press **set?** to select, now dLS will be displayed and ON will flash.

> **dLS** ON
> ?

9. Press + or - to switch between ON or OFF. If you choose ON then the clock will automatically adjust the time for Daylight saving. If you choose OFF then the time will not change to take account of the Daylight Saving time change twice a year.

10. Press **set?** twice to return to the normal display.

> **10:36**
> MON

> ✎ **NOTE:**
> dLS = Day Light Savings time

Maintenance

The LP20 requires no maintenance.

The outer casing can be wiped clean using a dry cloth. **DO NOT** use polish or detergents.

These units can not be serviced.

Should the existing units fail to function correctly, check that the:

- LP20 Programmer times and program settings are correct.

> **LP20 Programmer**
> **part number 25039DR**

Drayton

Support

401 Southway Drive
Plymouth
PL6 6QT
United Kingdom

Technical: +44(0)333 7000 622
customer.care@draytoncontrols.co.uk
www.draytoncontrols.co.uk

@DraytonHeating
/DraytonControls

Drayton
by **Schneider** Electric