



## Sundial RF<sup>2</sup> Pack 5

Wireless Enabled 2 Zone Programmer and Thermostats (Y9520Z1007)



In a heating system which has no room thermostat, or the system needs upgrading to 2 heating zones, the existing wiring can be used to provide Boiler Interlock by fitting Sundial RF<sup>2</sup> Pack 5.

The pack contains:

- A wireless enabled 2 zone programmer (ST9520C)
- 2 x wireless room thermostats (DT92E).

Communication between the programmer and thermostat, as well as features such as Optimum Start\*, Delayed Start\*\* and Optimum Stop\*\*\*, enable users to save money and energy.

## FEATURES

- Energy-saving Time Proportional and Integral (TPI) control
- Wireless-enabled upgrade
- Two-way wireless communication
- Wireless signal strength indicator
- Built-in Economy or Comfort programmes on ST9520C
- Line of Text (LoT) display for easy programming on ST9520C
- ST9520C fits on industry standard back plate
- ECO setback function on DT92E
- Frost protection on DT92E
- Table-top stand supplied with DT92E
- Battery-powered DT92E – no wiring

## OPTIONS

- OpenTherm Boiler Control\*\*\*\* (with suitable OpenTherm Boiler)
- Remote Boiler control with wireless relay box (BDR91 supplied separately)
- Remote Valve control with wireless relay box (BDR91 supplied separately)
- Service interval reminder with variable levels of action
- Installer set-up mode – controls can be matched to the system and user

\* Optimum Start: To save energy, let the controls work out when to come on to suit when you want to be warm. Every day, the boiler will start at the latest possible moment depending on the weather.

\*\* Delayed Start: Once you have programmed your earliest start time, the controls will delay the boiler firing time on warmer days, when it is possible to save energy.

\*\*\* Optimum Stop: Saves energy and money by switching off before the normal programme time whenever possible.

\*\*\*\* OpenTherm Boiler Control: OpenTherm provides more precise control on the boiler through the control of the gas valve. It enables the amount of heat provided by the boiler to be controlled to match the varying demand signal. By reducing the flow temperature to a minimum as it leaves the boiler, the return temperature is kept below the dew point (55°C) whenever possible, thus enabling the boiler to operate in condensing mode.

## Installation

Simply remove the old programmer and replace with ST9520C. This enables the wireless thermostats (DT92E) to be added to the system. Otherwise, install as per installation instructions supplied with product. Remote boiler and remote valve installations are possible with wireless relay boxes (supplied separately).

The ST9520C and DT92E are radio frequency devices and for best performance should be installed in a clear space. Where possible, leave the ST9520C at least 30 cm from any metal objects, including wall boxes, and at least 1 m from any other electrical equipment.

The 2 x DT92E are free to be installed in suitable locations where the signal strength is high.

## Wiring

For full wiring instructions, please refer to the Wiring Guide or download the Honeywell Home Wiring Guide App from the Apple App Store or Google Play Store.

Download the new Honeywell Home 'Wiring Guide' app

SPECIFICATION	
<b>Pack 5</b>	
RF Operation Band	ISM (868.0 to 868.6 MHz), 1% duty cycle
RF Communication Range	Typically 30 m in residential building
RF Communication Technology	Two way short, high rate transmissions to minimise air time / avoid interference
RF Blocking Immunity	Receiver class 2
Operating Temperature Range	0 to 40°C
Operating Humidity Range	10 to 90% RH, non-condensing
Storage Conditions	-20 to 55°C 10 to 90% RH, non-condensing
Standards	CE marked
IP Rating	IP30
<b>ST9520C</b>	
Switch Rating	3(3)A max at 230 VAC
Switch Type	2x Single pole, double throw (SPDT) relay
Power Supply	230 VAC 50 Hz 10 W
Power Reserve	Built-in battery maintains factory-set date and time. Backup super capacitor retains real time for more than 1.5 hours All settings and parameters stored in NVRAM will be retained indefinitely
Wiring	Wiring terminals with captive cage clamps, accepting two wires each up to 2.5 mm <sup>2</sup>
Time Setting Resolution	Time of day – 1 minute Programme time changes – 10 minutes
Time Display	24 hour or 12 hour AM/PM format
Timing Accuracy	Typically better than 10 minutes per year Time and date factory set
<b>DT92E</b>	
Power Supply	Two AA size, 1.5 V alkaline batteries
Temperature Setting Range	5 to 35°C in 0.5°C steps can be limited between 5 and 35°C
OFF Set point Temperature	5°C (default) Can be set between 5 and 16°C or turned off
ECO Set point Temperature	18°C (default) Can be set between 5 and 35°C (in 1°C steps), for 1 to 24 hours
Temperature Control Accuracy	±0.5 K at 20°C (50% load, 3 K/hr)

## For more information

[heatingcontrols.honeywellhome.com](http://heatingcontrols.honeywellhome.com)



### ErP energy efficiency ratings

The ErP energy efficiency ratings shown in this brochure will provide installers and end users with the information required to both complete the ErP energy label and assess the benefits of the heating controls to the overall heating system in the property. These ratings apply to room thermostats (including programmable thermostats).

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