WIRELESS ENABLED PROGRAMMER AND THERMOSTAT

WIRELESS ENABLED CONTROLS

SUNDIAL RF² PACK 2

FEATURES

Energy saving †TPI control

Wireless enabled upgrade

Two way wireless communication

Wireless signal strength indicator

ST9420C Wireless Enabled Programmer

Built in Economy or Comfort programmes

LoT™ display for easy programming

Fits on industry standard backplate

7 day programming

Direct replacement for ST9400 and ST6400 models

DT92E Wireless Thermostat

ECO setback function

Frost protection

Tabletop stand supplied

Battery powered - no wiring

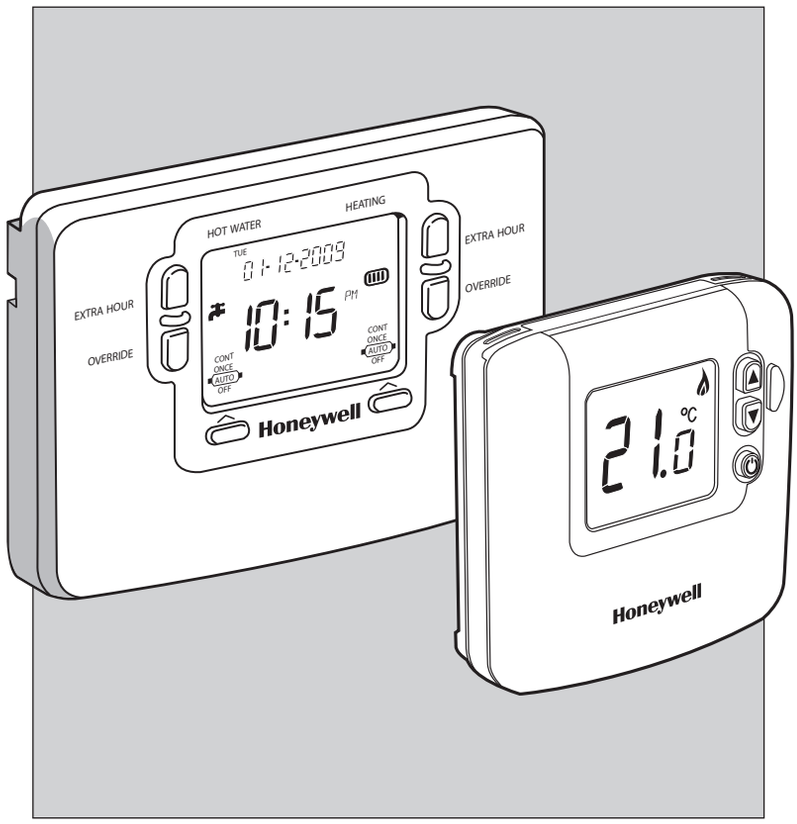
OPTIONS

*Optimum Start, **Delayed Start and ***Optimum Stop

'OFF' setting adjustable from 5 to 16°C

Service Interval reminder with variable levels of action

Installer set up mode - controls can be matched to the system and user



APPLICATION

In a stored hot water heating system which has no room thermostat, the existing wiring can be used to provide Boiler Interlock by fitting Sundial RF² Pack 2.

This has a full programmer, with independent heating and hot water and a built in wireless transceiver to enable a wireless room thermostat, maintaining the traditional layout of separate time control and room thermostat. It can also be used on new systems.

Because the room thermostat and the programmer communicate, energy saving and operating benefits are also enabled:

Programmer override from the thermostat.

†TPI control: Time Proportional and Integral (TPI) control is a method of calculating the demand from a room thermostat, controlling the boiler so that it fires for shorter periods as the temperature approaches the set point. This can offer savings of up to 10% of energy consumption (in a single cycle steady state test).

*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.

Honeywell

WIRELESS ENABLED PROGRAMMER AND THERMOSTAT SUNDIAL RF² PACK 2

Ordering Specification

Y9420H1008
ST9420C Wireless enabled programmer
DT92E Wireless room thermostat

Installation

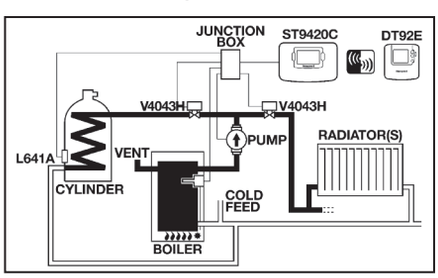
Simply remove the old programmer and replace with ST9420C. This enables the wireless thermostat (DT92E) to be added to the system.

The ST9420C and DT92E are radio frequency devices and for best performance should be installed in a clear space. Where possible leave the ST9420C at least 30cm distance from any metal objects including wall boxes and at least 1m from any other electrical equipment.

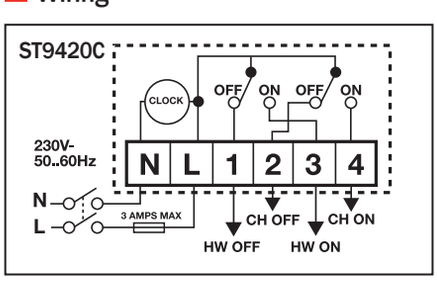
The DT92E is free to be installed in a suitable location when the signal strength is high.

Do not subject the room thermostat to extraneous heat gains, direct sunlight or draughts.

Schematic Layout



Wiring



Just replace existing programmer, fits directly on to many other programmer backplates. No power supply required to thermostat.

For dimensions see catalogue pages for the ST9400 and DT92E models. ST9420C dimensions are the same as ST9400 models.

Specification

Pack 2	
RF Operation Band	: ISM (868.0 to 868.6) Mhz, 1% duty cycle
RF Communication Range	: Typically 30m 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 40ºC
Operating Humidity Range	: 10 to 90% r.h, non-condensing
Storage Conditions	: -20 to 55ºC : 10 to 90% r.h, non-condensing
Standards	: CE marked
IP Rating	: IP30
ST9420C	
Switch Rating	: 3(3)A max at 230Vac
Switch Type	: 2x Single pole, double throw (SPDT) relay
Power Supply	: 230Vac 50Hz 10W
Power Reserve	: Built in battery maintains factory set date & 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 2.5mm²
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
DT92E	
Power Supply	: Two AA size, 1.5V alkaline batteries
Temperature Setting Range	: 5 to 35ºC in 0.5ºC steps can be limited between 5 and 35ºC
OFF Setpoint Temperature	: 5ºC (default) can be set between 5 & 16ºC or turned off
ECO Setpoint Temperature	: 18ºC (default) can be set between 5 & 35ºC (in 1ºC steps), for 1 to 24 hours
Temperature Control Accuracy	: ± 0.5K at 20ºC (50% load, 3K/hr)

ErP Class IV +2%

CE