

# WIRELESS ENABLED TIMER AND CYLINDER THERMOSTAT

## SUNDIAL RF<sup>2</sup> PACK 4

### FEATURES

- Energy saving <sup>†</sup>TPI control
- Wireless enabled upgrade
- Two way wireless communication
- Wireless signal strength indicator

### ST9120C Wireless Enabled Timer

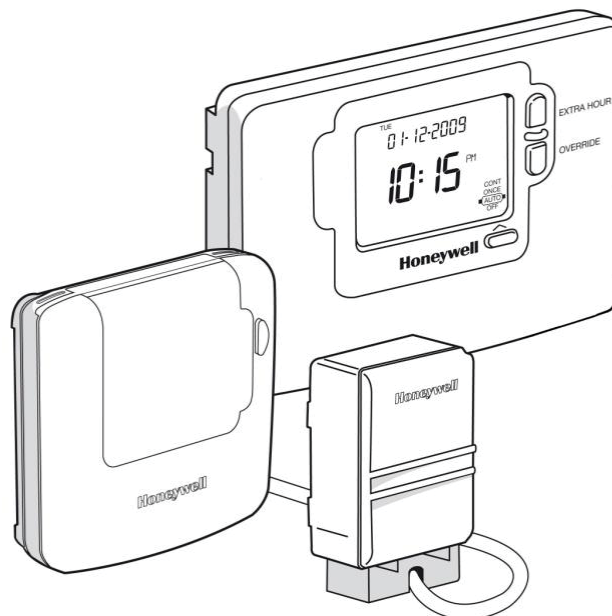
- Built in Economy or Comfort programmes
- LoT™ display for easy programming
- Fits on industry standard backplate
- Direct replacement for ST9100 and ST6100

### CS92A Wireless Cylinder Thermostat

- Set and controlled from programmer
- Battery powered - no wiring

### OPTIONS

- 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 cylinder thermostat the existing wiring can be used to provide Boiler Interlock by fitting Sundial RF<sup>2</sup> Pack 4.

This has a timer with a built in wireless transceiver to enable the cylinder thermostat, maintaining the traditional layout of separate time control and thermostats. It can also be used on new systems.

Ideal for systems controlled by heating only programmable thermostats or where a hot water cylinder is being added to an existing heating system.

Because the sensor and the timer communicates, energy saving and operating benefits are also enabled:

Cylinder sensor controlled from the programmer.

WIRELESS ENABLED CONTROLS

# Honeywell

## Ordering Specification

**Y9120W1000** comprising:  
 ST9120C wireless enabled timer  
 CS92A wireless cylinder thermostat

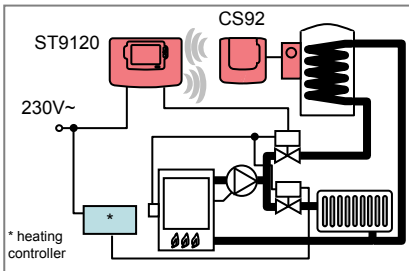
## Installation

Simply remove the old timer (if fitted) and replace with ST9120C. This enables the wireless cylinder thermostat (CS92A) to be added to the system. Otherwise install as per installation instructions supplied with product. Remote boiler and remote valve installations possible with wireless relay boxes (supplied separately).

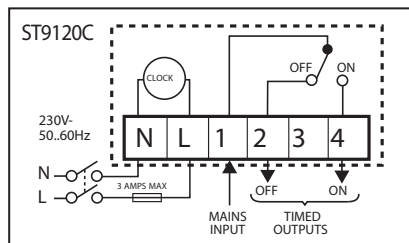
The ST9120C and CS92A are radio frequency devices and for best performance should be installed in a clear space. Where possible leave the ST9120C at least 30cm distance from any metal objects including wall boxes and at least 1m from any other electrical equipment.

The CS92A wireless transceiver should be located next to the cylinder with its sensor in contact with the metal surface.

## Schematic Layout (typical)



## Wiring



Just replace existing timer, fits directly onto many other timer backplates. No power supply required to cylinder sensor.

For dimensions see catalogue pages for ST9100, L641A and BDR91 models. (ST9120C dimensions are the same as the ST9100 models. CS92A dimensions are the same as L641 and BDR91).

## Specification

### Pack 4

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 40°C
Operating Humidity Range	: 10 to 90% r.h, non-condensing
Storage Conditions	: -20 to 55°C
	: 10 to 90% r.h, non-condensing
Standards	: CE marked
IP Rating	: IP30

### ST9120C

Switch Rating	: 3(3)A max at 230Vac, 10mA minimum at 12Vdc
Switch Type	: 1x Single pole, double throw (SPDT) potential free 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 2.5mm <sup>2</sup>
Time Setting	: Time of day - 1 minute
Resolution	: 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

### CS92

Power Supply	: Two AA size, 1.5V alkaline batteries
Temperature Setting Range	: 40 to 85 °C (set in ST9120C)
Sensor cable length	: 1.5m between sensor and transceiver