

Replacement Wiring

If using the ST9100 to replace other Honeywell Timers, the equivalent wiring terminations are shown in the tables below.

ST6100A, ST6100C	L	N	1	2	4
* ST9100A, ST9100C	L	N	1	2	4
* Note: ST6100S1000 should be replaced by ST9100S. If ST9100A or ST9100C are used for replacing ST6100S, please refer to Honeywell for wiring details. The Service Timeout feature will not be available in this case, and wiring may have to change, depending on the application.					

ST7000B	L	-	-	2	3
** ST9100	L	N	1 Link to terminal L	2	4
** Note: A permanent mains supply must be provided for the ST9100 Timer.					

Replacing Other Manufacturers’ Time Controls

ST9100 Timers will mount directly onto many existing manufacturers’ back-plates, without the need for re-wiring. However, they are also supplied complete with a wiring back-plate, should this not be the case.

Refer to Honeywell for wiring conversion diagrams. (see Wiring Guide document **EN3H 2393 UK01**)

Completion Checklist for Installation

- 1. Check unit powers up correctly, and that the display does not remain blank.
- 2. Set operating mode to **AUTO** and switch on and off using the **OVERRIDE** button, to ensure the system is operating correctly.
- 3. Check the factory-set day, date, and time are correct and adjust if necessary. Refer to the User Guide for details.
- 4. If required, enter Installer Mode and adjust Installer Parameters to match the lifestyle and needs of the User. Remember to make a note of these parameter changes in the Configuration Data section of the User Guide.
- 5. Explain the operation of the product to the User and help them to set their programme. There are 3 built-in profiles that can be used as a basis for a typical User programme.
- 6. If required, attach the self-adhesive programme guide label to the underside of the cover flap. The label is supplied in the box and requires to be peeled away from the backing material before use.
- 7. Explain when the User should contact someone to arrange a Service Visit.
- 8. Write the date of installation, your name and telephone number in the space provided in the User Guide, in the section ‘Boiler & System Service Log’
- 9. Remember to leave the User Guide and Installation Instructions with the User and remind them to keep them in a safe place. This forms part of a Home Information Pack.

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50022736-001 A
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ST9100A & ST9100C Timer
INSTALLATION INSTRUCTIONS

Introduction

ST9100 is an Electronic Timer which provides accurate time control for central heating systems and other applications. ST9100A is a 1-day version and ST9100C is a 7-day version.

ST9100 is suitable for replacing a wide range of Timers on the market, and is a direct replacement for Honeywell ST6100 Timers without the need for re-wiring.

ST9100 Timers can be combined with other Honeywell controls such as Room Thermostats, Cylinder Thermostats, Wiring Centres and Zone or Diverting Valves to form a fully automatic central heating control system.

Specification

Power Supply: 230V~, 50...60Hz, 10W
Switch Action: 1 x SPDT, potential free
Switch Rating: 230V~, 50...60Hz, 3(3)A max, 10mA at 12 Vdc minimum
Factory set clock
Power Reserve: lifetime battery
Programmes/Settings: permanently stored in NV RAM
Approvals: Conforms to protection requirements of Directives 2006/95EC and 89/336EC

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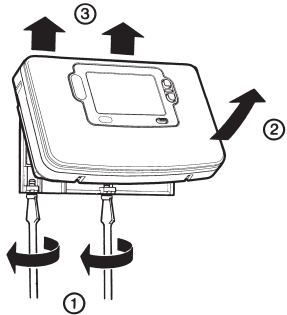
Mounting

If the ST9100 is replacing an existing ST6100 then the existing wall-plate and wiring may be used, subject to any required electrical checks.

The Timer should be mounted at a level where the display can be seen clearly, (1.2 to 1.5m from the floor) and the ambient temperature is within the range of 0 to 40°C. The ST9100 is for use in normal domestic environments.

CAUTION

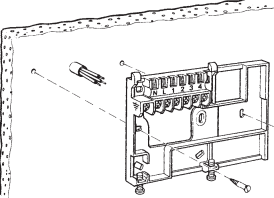
Isolate power supply and make safe before wiring the unit to prevent electric shock and equipment damage. Installation should be carried out by a qualified electrician or competent heating engineer.



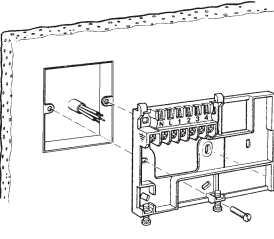
To remove the unit from the wall-plate, slacken the two securing screws at the bottom of the ST9100 and hinge the unit up to separate the two halves.

Mounting Options

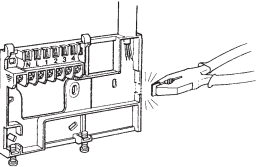
RECOMMENDED CLEARANCE DISTANCES:
ABOVE WALLPLATE: 110mm
BELOW WALLPLATE: 100mm
LEFT/RIGHT OF WALLPLATE: 10mm



a. Surface mounting concealed wiring



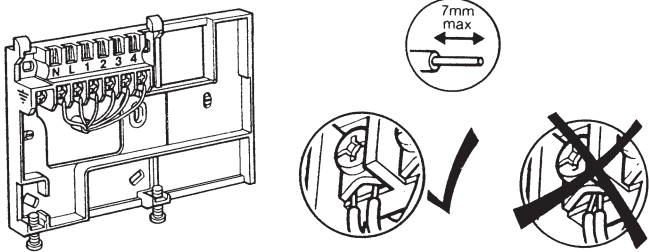
b. Flush switchbox
Fixing holes are spaced to suit BS4662 requirements



c. Surface mounting with surface wiring in mini trunking

Ensure the mounting surface is supporting and fully covers the wiring wall-plate.

Wiring



ALL WIRING MUST BE IN ACCORDANCE WITH I.E.E. REGULATIONS. THIS UNIT IS FOR FIXED WIRING ONLY.

A switch, having contact separation of at least 3mm in all poles (formerly Class 'A'), must be incorporated in the fixed wiring as a means of disconnecting the supply.

The unit is a Class II (double insulated) device. A parking terminal is provided for external earth continuity.

The system must be appropriately fused. A fuse rated at no more than 3 Amps should be installed.

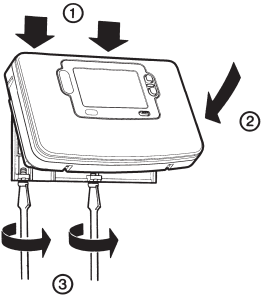
The unit has 4 knockouts for surface wiring, care must be taken to ensure that the cable or mini-trunking completely fills the knockout hole without leaving any gaps.

Final Assembly

Clip the unit onto the hinges on the top of the wallplate and hinge down into position. Tighten the two securing screws using a screwdriver.

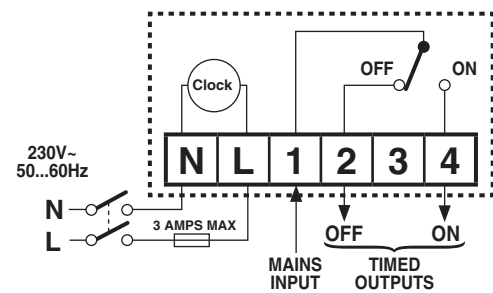
Switch on the power – the unit will now be operating according to the built-in programme. Note : the ST9100 is supplied with a factory set clock for faster installation .

Refer to ST9100 User Guides for programming details.



WIRING CONNECTIONS

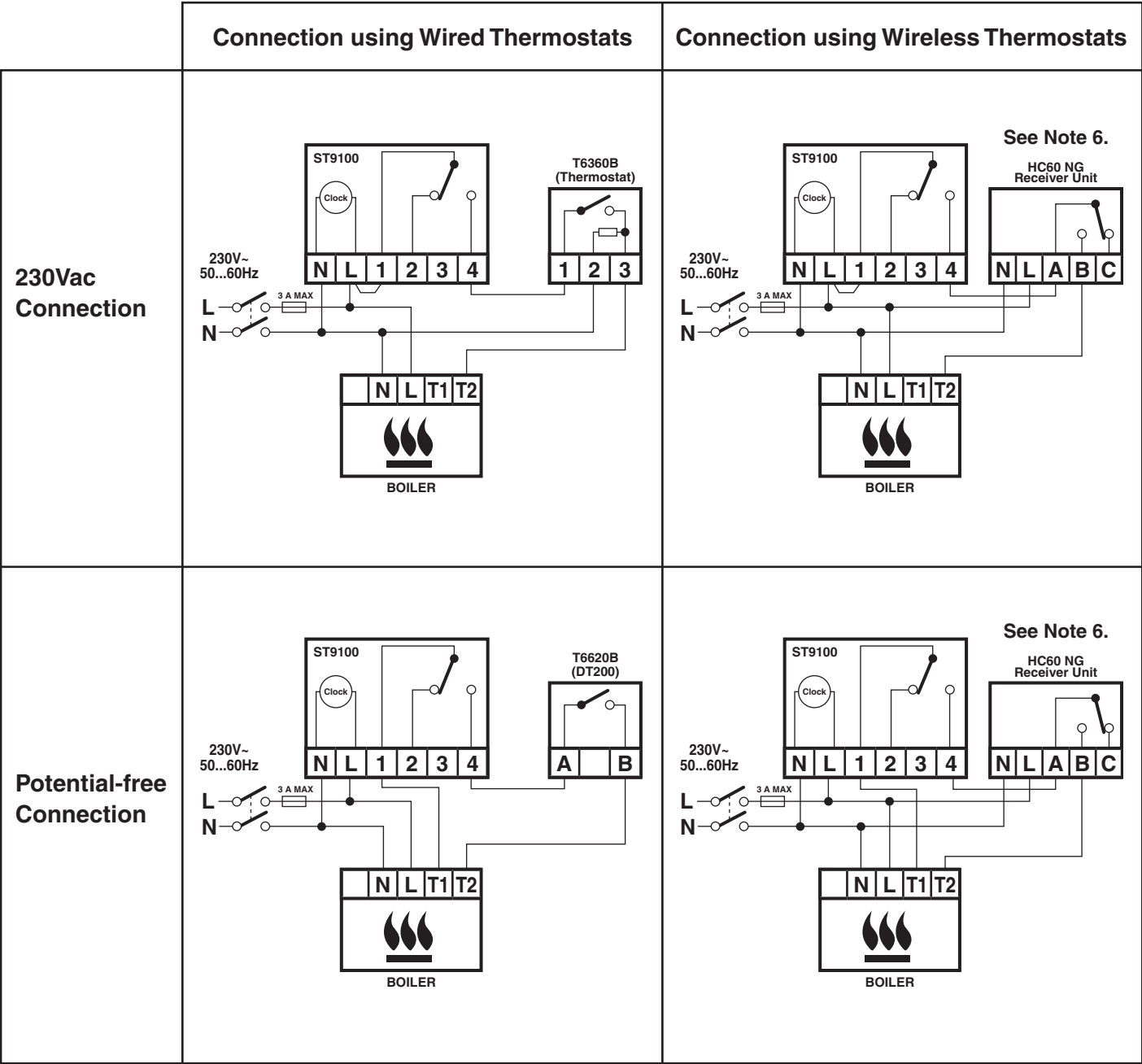
ST9100 Internal Wiring



Notes

- 1. ST9100 is suitable for contact-closure potential free or mains voltage switching
- 2. If normal mains voltage is required, link terminals L and 1.
- 3. The ST9100 is a Class II (double insulated) device. A parking terminal is provided for earth wiring continuity, if required.
- 4. Where applicable, the ST9100 may also be used to control hot water systems independently.
- 5. Where applicable, multiple ST9100 timers may also be used to control Heating and Hot Water systems independently.
- 6. When connecting to a wireless receiver unit, the receiver MUST have permanent mains power from the fused spur, to operate correctly.

Connections to Combi Boiler



ADDITIONAL PRODUCT FEATURES

Installer Mode

The ST9100 has a special Installer Mode where some features can be adjusted to suit user lifestyle or preferences – these are called installer Parameters, and are listed in the table below, along with a description of the options that are possible.

INSTALLER PARAMETER	Parameter Number	LoT™ Display Description	Default Value	Range of Values	Description [LoT™ Display Description]
24hr or am/pm clock display	1	CLOCK MODE	12	12, 24	12 = am/pm display, [AM-PM] 24 = 24hr display [24 HOUR]
Configure backlight operation (backlight consumes no additional energy)	2	BACKLIGHT	2	0, 1, 2	0 = off, [NO B-LIGHT] 1 = on if button pressed, [B-L DELAY] 2 = on continuously [B-LIGHT ON]
Enable/disable auto time change	3	AUTO TIME	1	0, 1	0 = disabled, [NO CHANGE] 1 = enabled [TIME CHANGE]
* 1-day or 5/2-day or 7-day operation	4	UNIT TYPE	7	1, 5, 7	1 = 1-day operation, [1-DAY] 5 = 5/2-day operation, [5-2 DAY] 7 = 7-day operation [7-DAY]
Number of ON/OFFs per day	5	ON PERIODS	2 (for ST9100A) 3 (for ST9100C)	2, 3	2 = 2 on/off's per day, [2 PER DAY] 3 = 3 on/off's per day [3 PER DAY]
Select default time programme	6	DEF PROFILE	A	A, b, C	A = standard, [PROFILE A] b = at home, [PROFILE B] C = economy [PROFILE C]
** Reset all parameters	8	PROG RESET	1	0, 1	0 = do not reset [RESET OFF] 1 = default parameters [RESET ON]

* this parameter is NOT available on ST9100A, which is 1-day operation only.
** this parameter by default has a value of 1, unless you change any other parameter, when it will change to 0. Set it to 1 to reset all parameters back to defaults.

To Enter Installer Mode:

- a. Ensure the slider is in the RUN position, then press and hold the **OK** and **⊖** buttons together for 8 seconds. Ignore the 'NOT VALID' that is displayed for a few seconds. The message 'SET UP MENU' will show briefly, followed by 'SET INSTALLER OK ?'
- b. Press the **OK** button to take you into the Installer Mode Parameter Menu.
- c. Parameter 1 is now available to change. This is to allow you to change the clock format from 12 hour AM/PM to 24 hour. At every step, the LoT™ Display will inform you what the parameter means and what option you have selected. The parameter number is shown on the display separated by a colon from the parameter value.
- d. You can change the parameter value by pressing the **⊕** or **⊖** buttons. At this point the description in the LoT™ Display will change and the parameter value will flash. If you press **OK** the value will stop flashing and will be saved for use.
- e. Press **OK** to move to the next parameter available for editing. The parameter number will change accordingly.
- f. Keep pressing **OK** to step around the list of parameters, and use **⊕** or **⊖** buttons to change the parameter value.
- g. Any parameter changes that have been confirmed with the **OK** button will be saved and used.

To Exit Installer Mode:

You can exit Installer Mode at any time by moving the slider to the next position and then back again to **RUN**.
Note: Installer Mode will exit automatically after 10 minutes if the slider is not moved.

