

## Installation

### MAKE SURE MAINS INPUT HAS A 3 AMP FUSE

Installation should be carried out by a qualified electrician or heating engineer.

Position the wall-plate with 70mm clearance to its right, 25mm above and access to the securing screws underneath. Ensure that the supporting surface will fully cover the back of the timeswitch. The ideal location is 1.4 M above floor level, accessible, reasonably lit and free from condensation or extremes of temperature.

Fix the wall-plate, terminals at the top, either direct to a flat wall using wall plugs and No. 6 x 1" woodscrews or on a flush mounting single conduit box type UA1 (BS4662) using M3.5 x 14 screws.

DO NOT use a surface mounting box.

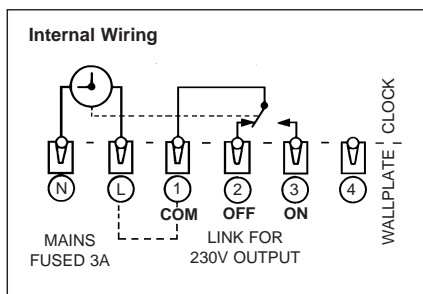
Make wiring connections as shown in the diagram below.

Note that the output contacts are voltage free so power needs to be put on to terminal 1, either by linking from terminal L or from a separate supply **with a 3A fuse**.

For surface wiring, use pliers to snap out the removable cable entry strip on the bottom edge of the wall-plate. The LP111 is double insulated and needs no earth connection but an earthing continuity (loop) terminal is provided for convenience.

Plug in the LP111 and tighten the securing screws. **Check the fuse (3A)** and reconnect the mains. Set timing and programme as detailed in the User Guide. Disconnect mains before removing timeswitch from wall-plate.

**NEVER FIT THE TIMESWITCH TO A LIVE WALL-PLATE.**



CONFORMS TO THE ESSENTIAL REQUIREMENTS OF THE FOLLOWING DIRECTIVES:  
89/336/EEC - Electromagnetic compatibility  
73/23/EEC - Low voltage Directive



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090 - 648 Issue C 08/01

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## User Guide

### LP111 24 Hour Electronic Timeswitch

The LP111 is an electronic timeswitch which will automatically switch ON and OFF once or twice a day at whatever times you choose.

You also have the option to obtain continuous ON or OFF operation.

It has the advantage of a battery back-up system to protect the switching times during power cuts or shut-downs. The timeswitch display will only be maintained for about 1 hour during a power loss to preserve the battery life.

### Technical Data

**Type:** LP111 Timeswitch

**Voltage:** 230V AC +10% -15% 50Hz

**Programming Resolution:** 10 minutes

**Rating:** 2 (1) A 230 V AC

**Ambient Temp:** 0°C to 45°C Operating  
- 20°C to 50°C Storage

**Battery Reserve:** Display - typically 1 hour  
Timekeeping - 7 to 8 hours  
Programme - Min 1 1/2 Years

**Wiring:** Designed for fixed wiring only to comply with current I.E.E. regulations

**Maintenance:** No user maintenance should be attempted.

**Invensys Climate Controls continuously seek to improve products and reserve the right to make changes without notice.**

## Programming

The clock in the LP111 has to be set to the actual time of day. It must then be told at what times you want it to switch ON and OFF. This set of switching times is known as a programme.

The LP111 has an in-built programme of standard switching times. They may well be right for you, but if they

are not exactly what you want you can change them.

The standard programme is shown in the table below, and, for simplicity, the switching operations are described as ON1, OFF1, ON2, and OFF2 from now on in this leaflet.

SWITCHING	STANDARD PROGRAMME	YOUR PROGRAMME
ON1 - Start of first timed 'ON' period of day	6.30 am	
OFF1 - End of first timed period	8.30 am	
ON2 - Start of second timed period	4.30 pm	
OFF2 - Final switch off	10.30 pm	

## Setting the Clock

Switch on the mains supply to the LP111 and hinge down the front cover. Press and release the button marked SET.

The question SET CLOCK ? will appear in the display. Press and release the button marked YES to answer the question and the hour part of the display will flash. Use the + and - buttons to change to the correct hour (check AM or PM) then press SET again. This will cause the minutes part of the display to flash.

Again use the + and - buttons to change the minutes as required, then press SET again.

The display will now show SET PROG ? (see later instructions for changing your programme). Press the SET button again and the display will show the time of day you have set.

Your timeswitch is now in the operating mode and ready to work using the built-in standard programme times.

## Programme Options

The LP111 gives you a choice of 4 options:

OFF: Off all the time.

TWICE: On for two periods each day.

ONCE: On for one period each day (ON1 → OFF2).

ON: On all the time.

Obtain the option you require by using the SELECT button to move the arrow in the display to the appropriate position.

Your timeswitch is now working using the standard

programme times.

If these suit your needs there is nothing else to do.

You can temporarily override the normal switching times by pushing the button marked ADVANCE.

This switches ON to OFF or OFF to ON as you require, but the normal programme switching times will not be permanently affected.

If you want to make changes to the programme, enter your programme in the table first (10 minute steps).

## Changing your Programme

With the timeswitch in the operating mode and the display showing the actual time of day, press the SET button. The display will show SET CLOCK ? but this has already been done so push the SET button again.

The question SET PROG ? will appear and as it is the programme timings which are to be changed answer by pressing the YES button.

The display will now show the time for the first switch on (ON1) to occur. This can be altered in steps of 10 minutes by the use of the + and - buttons. When the display is

showing the time you want, press SET and the OFF1 time will be seen.

Again changes may be made with the + and - buttons before pressing SET to display the time for ON2. After making any adjustments press SET again to get the OFF2 time displayed. This may be adjusted up to 23 hours 50 mins after the first switch on time.

Press SET again and the LP111 will go back into the operating mode, showing the actual time of day and ready to work using the times you have set.

## Helpful Hints

1. The + and - buttons are used to change times. Press and release for small changes; press and hold down and the time will 'run'.

2. You cannot set the first switch on time (ON1) before mid-night but you can set the OFF2 after mid-night so long as you don't try to exceed 23 hours 50 mins after ON1.

3. The four switching times have to be in sequence (ON1, OFF1, ON2, OFF2) if you try to set OFF1 earlier than ON1 the display will stop at the ON1 time with the OFF symbol flashing. The same thing will happen with other switching times e.g. between OFF1 and ON2, this time the ON symbol will flash.

4. If you attempt to set the ON1 time after the OFF1 time,

the ON symbol will flash and the OFF1 setting will follow the ON1 time being set to prevent incorrect programming.

The same feature applies with the ON2 and OFF2 times and also between the OFF1 and ON2 times.

5. If you get confused and wish to start the whole programming procedure again, press the SET and + buttons together for a moment. The timeswitch will revert to mid-night time display and the built-in standard programme. You will now have to set the clock again and then enter the programme you want.

6. When you are making adjustments to timings, if no button is pressed for 1 to 2 minutes, the programmer will automatically revert to the normal operating mode.