

# SANGAMO

## PSPS

### Powersaver Selectable Time Switch

The latest ESP product manuals can be found on-line:



### 1 // Features:

The Powersaver Select is a simple to use, multi application time switch. Although primarily used for the control of water heating, the PSPS can also be used for a multitude of applications including the control of panel heaters, towel rails or combi boilers.

- 24 hour, 5/2 day & 7 day electronic timer
- Up to 10 program operations per day
- 15 mins, 30 mins, 1 hour, 2 hour, 4hour and 6 hour boost function
- Automatic Summer/Winter time change
- Fits directly onto a single gang pattress box

### 2 // Specifications:

- Contact Rating: 16A Resistive 240V a.c.  
2A LED Lighting 240V a.c.
- Supply: AC220~240V 50/60 Hz
- Terminals: suitable for max. 2.5 mm<sup>2</sup> flexible and 4.0 mm<sup>2</sup> fixed cabling
- Dimension: 86\*86\*35mm
- Operation Temperature: 0 C~40 C
- Memory Reserve: Permanently reserve setting
- Display: LCD

Please Note: this is a Class 2 Product



### 3 // Front View and Back View(Fig. 1 and Fig. 2):



Fig. 1 Front View

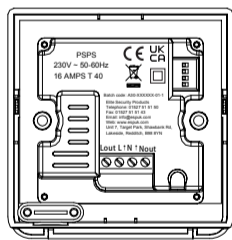


Fig. 2 Back View

### 4 // Wiring Diagram:

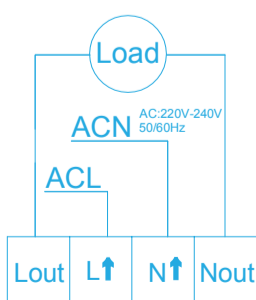


Fig.3 Wiring Diagram

### 5 // Installation Guide:

5.1 Flip open front plate from position A

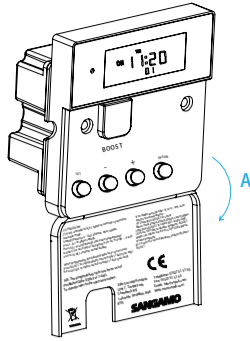


Fig.4

5.2 Wire in accordance with the Wiring diagram and Terminal markings.

Input Voltage:  
AC220V-240V 50/60Hz

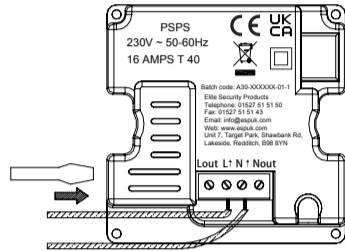


Fig.5

Installation must be by a suitably qualified person in accordance with the latest IEE wiring Regulations.

Provision must be made in the fixed wiring for a means of disconnection from the supply having a contact separation of at least 3mm on all poles. This can be provided by the consumer unit.

5.3 Fixing the mounting box on the wall and secure the unit to the mounting box with the 3.5mm screws provided.

a,b: Fixing Holes

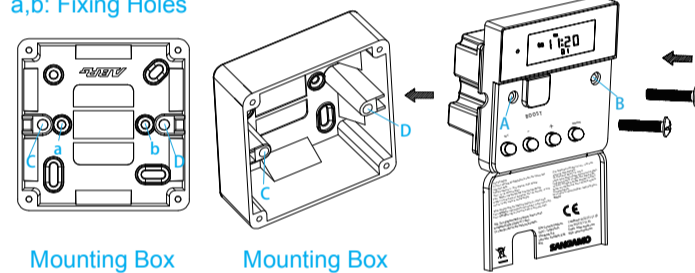
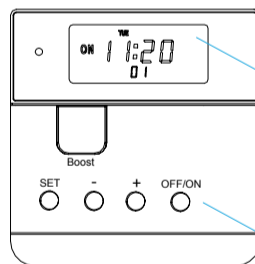


Fig.6

Insert the M3.5mm screws into A & B (on the switch) and C&D(on the mounting box) mounting holes.

### 6 // Operation Guide:



LCD Display

Hidden Keypad

Flip down the front cover to access to the hidden keypad for setting.

Fig.7

For Reset/Initial setting, all LCD segments flashing displays as below:

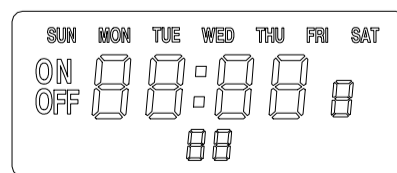


Fig. 8

6.1 Press "SET" to enter program cycle setting, press "-" and/or "+" to select program from cycle 1 to cycle 3 as below:

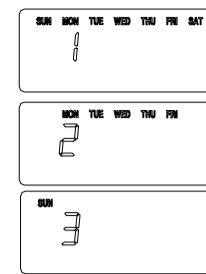


Fig. 9

**Cycle 1(default):** Daily (24 Hour) Cycle, all the days will flash simultaneously  
**Cycle 2:** Weekly (5/2 Day) Cycle, the weekdays and weekend will take turns to flash.  
**Cycle 3:** 24/7 (7 Day) Cycle, every day will take turns to flash.  
 If Cycle 3 is selected each day is programmed separately. Quick functions include:  
 • ON/OFF to move to the next day  
 • Boost to copy the previous day settings

These are only available on pressing SET button to enter timer setting. These functions are unavailable if the programming is being edited and '-' is flashing.

**NOTE:** This programming cycle selection is only offered as part of the initial product setup or if a Product Reset has been carried out. Under normal conditions the programming cycle selection display is not shown.

6.2 Set System Time

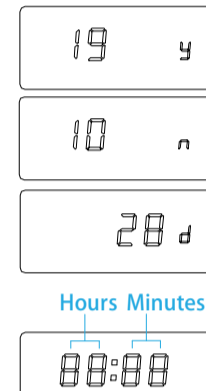


Fig. 10

Press "SET" button to enter system time setting. The year starts to flash, press "-" and/or "+" to set the year from 00 to 99.

Press "SET" button again, the month starts to flash, press "-" and/or "+" to set the month from 1 to 12.

Press "SET" button again, the day starts to flash, press "-" and/or "+" to set the day from 1 to 31.

Press "SET" button again, the hours display will flash, press "-" and/or "+" to adjust the hour from 00 to 23;

Press "SET" button again, the minutes display starts to flash, press "-" and/or "+" to adjust the minutes from 00 to 59.

(Holding down "-" and/or "+" will adjust the data quickly). Correct the system time: when at normal display interface, press and hold the SET button to enter the time correction mode.

6.3 After completing system time setting, press "SET" button to enter timer setting:

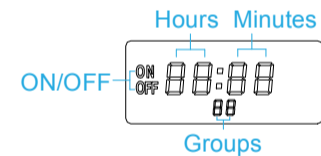


Fig. 11

Firstly, the LCD will display "--:00" and "01" "ON", which means it has entered the timer on time setting for the first group. The default display "--: 00" means no timer control has been set. Press "SET" button again, the hours display will flash, press "+" it will scroll --, 00,01...23", press "-" it will scroll --,23...00"; Press "SET" button again, the minutes display starts to flash, press "-" and/or "+" to adjust the minutes from 00 to 59.(Holding down "-" and/or "+" will adjust the data quickly).

Press "SET" button again, the hours will flash, and show 01, OFF, which means it has entered the timer off time setting for the first group. Set the timer off timer according to above method of setting timer on time.

6.4 Please complete the timer setting for other groups according to the above method.

If it is not required to set 10 groups of timer, you can press and hold the "SET" button to save and exit the initial setting directly.

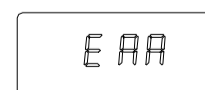


Fig. 12



Fig. 13

All groups timer must be in consecutive order, i.e. group 1 must be before group 2 & group 2 before group 3. If the wrong order is programmed, error messages will be displayed. Please press "SET" again to reset the timer for this group. The already set timer for other groups will not be affected.

6.5 Cancel the timer control setting: After completing the initial/reset setting, if timer control for one of the group needs to be cancelled, please set the timer on time to "--:00". When the timer on time is cancelled, the timer off time is default to be cancelled as well.

**NOTE:** Programming past midnight is NOT allowed. To overcome this, the program needs to be split in two parts from midnight as per example-  
Desired program period - on 22:00 off 07:00  
make Prog 1 - on 00:00 off 07:00  
make Prog 2 - on 22:00 off 00:00

6.6 Boost Function: As well as the programmable cycles, the PSPS offers 6 options on period duration using the BOOST button:

Press once = 1/4 hour (The LCD will display 0:15)  
Press twice = 1/2 hour (The LCD will display 0:30)  
Press three times = 1 hour (The LCD will display 1:00)  
Press four times = 2 hour (The LCD will display 2:00)  
Press five times = 4 hour (The LCD will display 4:00)  
Press six times = 6 hour (The LCD will display 6:00)  
Press seven times = Cancel function (The LCD will show 0:00 and return to normal display) Duration can be extended or cancelled by successive presses.

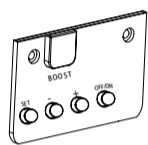


Fig. 14

6.7 Timer Control Override Function: If during a timer On time you wish to turn off the load, simply press the BOOST button once. Press BOOST button again, to enter Boost control. The load will keep on until the BOOST period is over or the timer on time of next group is due.

**NOTE:** Using the Timer Control Override Function will not affect the timer control settings & the next time it will function as normal.

6.8 Off (Holiday) Function: Allows you to suspend timer control whilst still allowing the Boost function to be used using the OFF/ON button.  
Press once = Suspend timer control(LCD display will include OFF)  
Press twice = Cancel(LCD will return to normal display)

**NOTE:** This is NOT an override function for timer setting. BOOST button is still active.

6.9 Keypad Lock: Press - & + together for 5 seconds to lock settings = display briefly shows L, and then return to normal display.

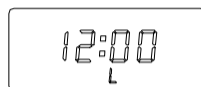


Fig. 15

**NOTE:** BOOST button is still active during keypad lock mode. Display shows L when other buttons pressed. Press - & + together for 5 seconds to unlock settings.

6.10 Product Reset (return to default settings): Switch off power to unit. Hold in BOOST button whilst switching power back on.

All LCD segments flashing displayed, Load On = Unit Reset  
Press BOOST = 1 displayed  
Press SET = 2 displayed  
Press - = 3 displayed  
Press + = 4 displayed  
Press OFF/ON = software version displayed  
Press SET to reprogram = All LCD segments flashing displayed, Load Off.

Load Status Indicator Light: There is a load status indicator light on the front panel. when the load is on, the green load status indicator light will illuminate; when the load is off, the indicator light will turn off.

Date Issued	Issue No	Description
J20	A30-PSPS-01-2	Rev.1

**Health & Safety**

This unit must be installed by a suitably qualified person in accordance with the latest IEE Wiring Regulations. Isolate mains supply before commencing installation. Please read all installation instructions before proceeding. Example circuit diagrams for typical installations are shown. These diagrams are schematic and should be used as a guide only. Please ensure that all installations comply with the current IEE regulations. For reasons of space and clarity not every system has been included and the diagrams have been simplified, for instance some Earth connections have been omitted. Other control components shown in the diagrams i.e. Valves, Room Stats etc. are general representations only. However, the wiring detail can be applied to the corresponding models of most manufacturers. Your product is not user serviceable. Do not dismantle this product. Due to our policy of continuous product improvement and development, the specifications in this guide may be subject to change without prior notice.

Elite Security Products  
Unit 7, Target Park, Shawbank Road,  
Lakeside, Redditch, B98 8YN

Tel: 01527 515150  
Fax: 01527 515143  
Email: info@espuk.com  
Web: www.espuk.com

