



# TIME SWITCHES & HEATING CONTROLS

Sangamo offer a wide range of time switches and heating controls for domestic, commercial and industrial use. Our reputation for quality and reliability is unrivalled.

**SANGAMO**

## CHOICE PLUS PROGRAMMERS

For certain properties a simple programmer to activate the heating or hot water is all that is required. A Choice+ Programmer allows the occupant to specify when a call for heat is made in order to match their lifestyle and ensuring energy efficiency.

There is an option of 1 to 3 channel programmers in order to suit the system application; from single channel control suitable for combi boilers, to double control for independent heating and hot water, and finally a 3-channel option for when 2 heating zones are required.

In addition, each Choice+ Programmer has a selectable Service Interval function, which assists with compliance to the Gas Safety Regulations requiring landlords to carry out annual gas safety checks on appliances in rented properties.

- 24 Hour, 5/2 Day and 7 Day Programmable
- 2 or 3 ON/OFF Periods
- 1, 2 or 3 Hour Boost
- Holiday Mode
- Pre-Programmed Schedule Ready for Use
- Summer/Winter Time Change
- Backlit Display
- Suitable for pumped systems
- With/without Service Interval Function
- 2A Switch Rating 240vAC

Power Supply	230V AC, 50Hz
Operating Temperature	0°C to 40°C
Total Switch Rating	230V AC, 2(1)A (per channel)
Battery Type	Lithium Cell CR1225
Enclosure Protection	IP30
Materials	ABS
Wiring	Fixed wiring only
Service Interval Function	Programmable
Clock	12 hour am/pm, 1 minute resolution, accuracy +/- 1.5 sec/day
Program Selection	On, Off, Auto, All Day
Heating System	Pumped
Dimensions	140mm x 88.6mm x 32.1mm
Complies with	EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC



**CHPPR2 WHITE**   **CHPPR2S SILVER**   **CHPPR2B BLACK**  
2 Channel Programmer with Digital Display and Service Interval Function



- 24 Hour, 5/2 Day and 7 Day Programmable
- 2 or 3 ON/OFF Periods
- 1, 2 or 3 Hour Boost
- Holiday Mode
- Pre-Programmed Schedule Ready for Use
- Summer/Winter Time Change
- Backlit Display
- Suitable for pumped Systems
- With/without Service Interval Function
- 2A Switch Rating 240vAC

Power Supply	230V AC, 50Hz
Operating Temperature	0°C to 40°C
Total Switch Rating	230V AC, 2(1)A
Battery Type	Lithium Cell CR1225
Enclosure Protection	IP30
Materials	ABS
Wiring	Fixed wiring only
Service Interval Function	Programmable
Clock	12 hour am/pm, 1 minute resolution, accuracy +/- 1.5 sec/day
Program Selection	On, Off, Auto, All Day
Heating System	Gravity
Dimensions	140mm x 88.6mm x 32.1mm
Complies with	EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

**CHPPR1 WHITE**   **CHPPR1S SILVER**   **CHPPR1B BLACK**

1 Channel Programmer with Digital Display and Service Interval Function



- 24 Hour, 5/2 Day and 7 Day Programmable
- 2 or 3 ON/OFF Periods
- 1, 2 or 3 Hour Boost
- Holiday Mode
- Pre-Programmed Schedule Ready for Use
- Summer/Winter Time Change
- Backlit Display
- Suitable for pumped systems
- With/without Service Interval Function
- 2A Switch Rating 240vAC

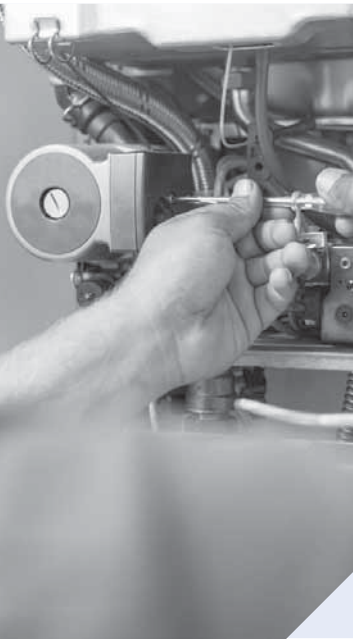
Power Supply	230V AC, 50Hz
Operating Temperature	0°C to 40°C
Total Switch Rating	230V AC, 2(1)A (per channel)
Battery Type	Lithium Cell CR1225
Enclosure Protection	IP30
Materials	ABS
Wiring	Fixed wiring only
Service Interval Function	Programmable
Clock	12 hour am/pm, 1 minute resolution, accuracy +/- 1.5 sec/day
Program Selection	On, Off, Auto, All Day
Heating System	Pumped
Dimensions	140mm x 88.6mm x 32.1mm
Complies with	EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC



**CHPPR3 WHITE**   **CHPPR3S SILVER**   **CHPPR3B BLACK**

3 Channel Programmer with Digital Display and Service Interval Function





## CHOICE PROGRAMMERS

Programmers are a key component of heating control systems. Since many homes are unoccupied for parts of the day, there is little point in heating them if no one is there to benefit. A programmer allows the occupant to specify when the heating comes on to match their lifestyle and their heating requirements.

For many people in the UK, this simply means firing up the heating in the winter months for a couple of hours in the morning, so the house is warm when they wake up, and then firing the heating up again in the evening so the house is warm when they get home until they go to bed.

- 24 hour, 5/2 day and 7 day selectable
- 2 or 3 ON/OFF periods selectable
- 1, 2 or 3 hour boost
- Advance to next programmed event
- Automatic Summer/Winter time change
- Standard wall plate - simple plug in and replace
- Pumped or gravity system selectable

Power Supply	230V AC, 50Hz
Operating Temperature	0°C to 40°C
Total Switch Rating	230V AC, 2(1)A (per channel)
Contact Type	1B, Micro-Disconnection
Battery Type	Lithium Cell CR2032
Enclosure Protection	IP30
Plastics	Thermoplastic, flame retardant
Insulation Class	Double
Wiring	Fixed wiring only
Backplate	Industry standard
Dimensions	140mm x 87mm x 37mm
Clock	12 hour am/pm, 1 minute resolution, accuracy +/- 1.5 sec/day
Program Resolution	10mins
Program Selection	Auto, On all day, On constant, off
Heating System	Pumped or Gravity
Complies with	EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC



2 channel programmer. Designed for separate control of heating and stored hot water. This programmer can also be used with gravity systems.

**CHOICE PR2n**  
2 Channel Programmer



1 channel programmer. Ideal for use with combi boilers with only one heating zone. This programmer has volt free contacts.

- 24 hour, 5/2 day and 7 day selectable
- 2 or 3 ON/OFF periods selectable
- 1, 2 or 3 hour boost
- Advance to next programmed event
- Automatic Summer/Winter time change
- Standard wall plate - simple plug in and replace
- Pumped

Power Supply	230V AC, 50Hz
Operating Temperature	0°C to 40°C
Total Switch Rating	230V AC, 2(1)A
Contact Type	1B, Micro-Disconnection (Voltage Free)
Battery Type	Lithium Cell CR2032
Enclosure Protection	IP30
Plastics	Thermoplastic, flame retardant
Insulation Class	Double
Wiring	Fixed wiring only
Backplate	Industry standard
Dimensions	140mm x 87mm x 37mm
Clock	12 hour am/pm, 1 minute resolution, accuracy +/- 1.5 sec/day
Program Resolution	10mins
Program Selection	Auto, On all day, On constant, off
Heating System	Pumped
Complies with	EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

**CHOICE PR1n**  
1 Channel Programmer



- 24 hour, 5/2 day and 7 day selectable
- 2 or 3 ON/OFF periods selectable
- 1, 2 or 3 hour boost
- Advance to next programmed event
- Automatic Summer/Winter time change
- Standard wall plate - simple plug in and replace
- Pumped system
- Comply with Part L of the Building Regulations

Power Supply	230V AC, 50Hz
Operating Temperature	0°C to 40°C
Total Switch Rating	230V AC, 2(1)A (per channel)
Contact Type	1B, Micro-Disconnection
Battery Type	Lithium Cell CR2032
Enclosure Protection	IP30
Plastics	Thermoplastic, flame retardant
Insulation Class	Double
Wiring	Fixed wiring only
Backplate	Industry standard
Dimensions	140mm x 87mm x 37mm
Clock	12 hour am/pm, 1 minute resolution, accuracy +/- 1.5 sec/day
Program Resolution	10mins
Program Selection	Auto, On all day, On constant, off
Heating System	Pumped
Complies with	EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC



3 channel programmer offers 1 hot water channel and 2 separate heating zones, dependant on the homes plumbing but normally split upstairs & downstairs. This programmer meets the requirements of the building regulations for homes over 150m².

**CHOICE PR3n**  
3 Channel Programmer





### CHOICE PLUS THERMOSTATS

A Choice+ room thermostat regulates and maintains a desirable temperature throughout the home by calling for heat as the temperature varies throughout the day.

Choice+ thermostats include TPI feature to ensure a maintained temperature by analysis of the heating and cooling periods. Choice+ programmable thermostats include Optimum Start and Delayed Stop for additional efficiency, heating and cooling for the time programmed.

These features combine to offer the best in heating comfort and energy efficiency when compared to traditional On/Off thermostats.

For installation convenience Choice+ wireless thermostats are available if a hardwired connection is not available in the intended location.

- Large Temperature Adjustment Dial
- Tamper Resistance Cover with Security Torx Screw
- Electronic Sensor for Accurate and Responsive Performance
- TPI (Time Proportional & Integral) Control for Heating Efficiency
- 5°C to 30°C Set Temperature Range
- 0.5°C and 1°C Temperature Swing Adjustment
- 10A Switch Rating 240vAC

Power Supply	230V AC, 50Hz
Operating Temperature	-5°C to 50°C
Current Rating	10A
Temperature Swing Adjustment	0.5°C and 1°C
Set Temperature Range	5°C to 30°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Call for Heat Indication LED	Yes
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Tamper Resistant	Yes; Tamper Resistance Cover with Security Torx Screw
Dimensions	86mm x 88mm x 38mm
Complies with	EN60730-1, EN60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC



CHPRSTATT WHITE CHPRSTATT S SILVER CHPRSTATT B BLACK

Tamperproof Electronic Room Thermostat



- Large Temperature Adjustment Dial
- Call for Heat Indication LED
- Electronic Sensor for Accurate and Responsive Performance
- TPI (Time Proportional & Integral) Control for Heating Efficiency
- 5°C to 30°C Set Temperature Range
- 0.5°C and 1°C Temperature Swing Adjustment
- 10A Switch Rating 240vAC

Power Supply	230V AC, 50Hz
Operating Temperature	-5°C to 50°C
Current Rating	10A
Temperature Swing Adjustment	0.5°C and 1°C
Set Temperature Range	5°C to 30°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Call for Heat Indication LED	Yes
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Dimensions	86 mm x 88 mm x 38 mm
Complies with	EN60730-1, EN60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

CHPRSTAT WHITE CHPRSTAT S SILVER CHPRSTAT B BLACK

Electronic Room Thermostat



- Electronic Sensor for Accurate and Responsive Performance
- Tamper Resistance Cover with Security Torx Screw
- -5°C to 30°C Set Temperature Range
- 0.5°C and 1°C Temperature Swing Adjustment
- 10A Switch Rating 240vAC

Power Supply	230V AC, 50Hz
Operating Temperature	-5°C to 50°C
Current Rating	10A
Temperature Swing Adjustment	0.5°C and 1°C
Set Temperature Range	-5°C to 30°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Call for Heat Indication LED	Yes
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Tamper Resistant	Yes; Tamper Resistance Cover with Security Torx Screw
Dimensions	86mm x 88mm x 38mm
Complies with	EN60730-1, EN60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC



CHPRSTATF WHITE CHPRSTATF S SILVER CHPRSTATF B BLACK

Electronic Frost Thermostat





- Large Dial with Digital Display
- Electronic Sensor for Accurate and Responsive Performance
- TPI (Time Proportional & Integral) Control for Heating Efficiency
- Comfort/Economy or ON/OFF Modes
- Battery Powered with Low Indication Status (Batteries Supplied)
- 5°C to 30°C Set Temperature Range
- Frost Protection
- 3A Contact Rating (Volt Free)

Power Supply	2 x AA Batteries
Operating Temperature	0°C to 50°C
Current Rating	3A
Switching Differential	1°C
Set Temperature Range	5°C to 30°C
Temperature Frost Protection	5°C
Temperature Display Range	3°C to 51°C
Frost Protection	Yes; 5°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Dimensions	86mm x 88mm x 38mm
Complies with	EN60730-1, En60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

CHPRSTATD WHITE CHPRSTATDS SILVER CHPRSTATDB BLACK

Electronic Room Thermostat with Digital Display



- Large Dial with Digital Display
- Wireless Communication Between Thermostat and Receiver
- Electronic Sensor for Accurate and Responsive Performance
- TPI (Time Proportional & Integral) Control for Heating Efficiency
- Comfort/Economy or ON/OFF Modes
- Battery Powered with Low Indication Status (Batteries Supplied)
- 5°C to 30°C Set Temperature Range
- Frost Protection
- Transmission frequency: 433 Mhz (80m Open Field, 30m Indoor Transmission)
- 16A Receiver Contact Rating(Volt Free)

Power Supply	2 x AA Batteries (Transmitter) & 240VAC, 50hz (Receiver)
Operating Temperature	0°C to 50°C
Current Rating	16A
Switching Differential	1°C
Set Temperature Range	5°C to 30°C
Temperature Frost Protection	5°C
Temperature Display Range	3°C to 51°C
Frost Protection	Yes; 5°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Transmission Distance	80m open, 30m indoors
Transmission Frequency	433 Mhz
Dimensions	86 mm x 88 mm x 38 mm
Complies with	EN60730-1, En60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

CHPRSTATDRF WHITE CHPRSTATDRFS SILVER CHPRSTATDRFB BLACK

Wireless Electronic Room Thermostat with Digital Display



- 24 or 7 Day Programmable
- 6 Time/Temperature Events per Day
- Permanent, Timed and Temporary Override Features
- Pre-Programmed Schedule Ready for Use
- Electronic Sensor for Accurate and Responsive Performance
- TPI (Time Proportional & Integral) Control for Heating Efficiency
- Optimum Start/ Delay Start and Delayed Stop for Additional Efficiency
- Summer/Winter Time Change

Power Supply	4 x AAA Batteries
Operating Temperature	0°C to 50°C
Current Rating	3A
Switching Differential	+/-0.5°C or +/-1.0°C selectable
Set Temperature Range	5°C to 35°C
Temperature Accuracy	+/-1°C
Temperature Display Range	0°C to 50°C
Frost Protection	Yes; 5°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Optimum Start/ Delay Start and Optimum Stop for Additional Efficiency	Yes
Programming Schedule	24 Hour or 7 Days
Available Operations	Up to 6 per Day
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Dimensions	140mm x 88.6mm x 32.1mm
Complies with	EN60730-1, En60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC



CHPRSTATDP WHITE CHPRSTATDPS SILVER CHPRSTATDPB BLACK

7 Day Programmable Room Thermostat



- Wireless Communication Between Thermostat and Receiver
- 24 or 7 Day Programmable
- 6 Time/Temperature Events per Day
- Permanent, Timed and Temporary Override Features
- Pre- Programmed Schedule Ready for Use
- Electronic Sensor for Accurate and Responsive Performance
- TPI (Time Proportional & Integral) Control for Heating Efficiency
- Optimum Start/ Delay Start and Delayed Stop for Additional Efficiency
- Battery Powered with Low Indication Status (Batteries Supplied)

Power Supply	4 x AAA Batteries & 240VAC, 50hz (Receiver)
Operating Temperature	0°C to 50°C
Current Rating	16A
Switching Differential	+/-0.5°C or +/-1.0°C selectable
Set Temperature Range	5°C to 35°C
Temperature Accuracy	+/-1°C
Temperature Display Range	0°C to 50°C
Frost Protection	Yes; 5°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Optimum Start/ Delay Start and Optimum Stop for Additional Efficiency	Yes
Programming Schedule	24 Hour or 7 Days
Available Operations	Up to 6 per Day
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Transmission Distance	80m open, 30m indoors
Transmission Frequency	433 Mhz
Dimensions	88mm x 88mm x 39.4mm
Complies with	EN60730-1, En60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC



CHPRSTATDRF WHITE CHPRSTATDRFS SILVER CHPRSTATDRFB BLACK

Wireless Programmable Thermostat with Digital Display





## CHOICE THERMOSTATS

A room thermostat is used to regulate and maintain a desirable temperature throughout the home. It works by switching the heating system on and off as the temperature varies throughout the day.

For example, if the temperature drops below a certain level, a sensor in the room thermostat can be made to trigger the switch for the boiler and pump which will heat the radiators and in turn, the rooms in the home. If the room rises above a certain temperature, the thermostat will then turn off the central heating system so that your house will cool down to its desired temperature once more.

- Dual diaphragm temperature sensing element
- Suitable for surface or pattress box mounting
- 10 to 30°C Set point range
- 2 Wire Installation
- Three terminal heating/cooling changeover
- Complete with tamperproof cover

Power Supply	230V AC, 50Hz
Operating Temperature	10°C to 30°C
Current Rating	10(3) A
Temperature Differential	Approx 4°C
Operating Temperature Range	0°C to 40°C
Dimensions	L83 x H83 x D37
Complies with	EN60730-1, EN60730-2-9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC



**CHOICE RSTAT1T**  
Tamperproof Mechanical Thermostat



- Dual diaphragm temperature sensing element
- Suitable for surface or pattress box mounting
- 10 to 30°C Set point range
- 2 Wire Installation
- Three terminal heating/cooling changeover

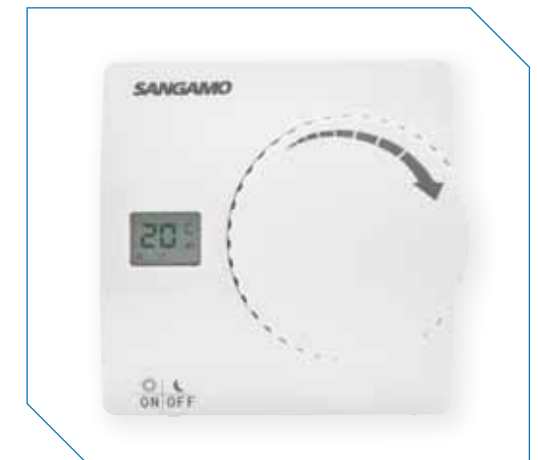
Power Supply	230V AC, 50Hz
Operating Temperature	10°C to 30°C
Current Rating	10(3) A
Temperature Differential	Approx 4°C
Operating Temperature Range	0°C to 40°C
Dimensions	L83 x H83 x D37
Complies with	EN60730-1, EN60730-2-9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

**CHOICE RSTAT1**  
Mechanical Thermostat



- LCD showing room temperature
- Comfort/Economy or ON/OFF modes
- Frost protection
- Battery Powered (with battery low indication)
- 2 wire installation
- 5-30°C set point range

Power Supply	2 Alkaline batteries 1.5V (type AA)
Contact Rating	3A, 250V AC, (Volt free contact)
Power reserve	1 year
Temperature adjustment range	5-30°C
Temperature frost protection	5°C (Non adjustable)
Temperature display range, scale	3 to 51°C, 1°C
Operating Temperature	0 to 50°C
Storage Temperature	10-60°C
Switching Differential	+/- 1°C
Protection Rating	IP21
Wire Size	0.5-1.5mm2
Dimensions	86mm x 86mm x 32mm
Complies with	EN60730-1, EN60730-2-9, EMC directive 2004/108/EC, LVD directive 2006/95/EC



**CHOICE RSTAT3**  
Digital Thermostat





- 30 meters range to the Receiver
- Comfort/Economy or On/Off modes
- Unique RF address to avoid interference
- Clear LCD display showing room temperature
- Large control dial
- Frost protection
- 5-30°C set point range

Transmitter	
Power Supply	2xAAA 1.5V batteries
Battery Lifespan	1 year
Temperature Adjustment Range	5-30°C
Temperature Display Range, Scale	3-51°C, 1°C
Temperature Frost Protection	5°C (non adjustable)
Switching Differential	+/- 1°C
Dimensions	86 x 86 x 32mm
Transmission Frequency	433Mhz
Transmission Distance	80m open, 30m indoors
Mounting Method	Wall/Surface
Receiver	
Power Supply	230Vac, 50Hz
Contact Rating	16A, 250Vac (Volt Free contact)
Insulation class	2
Flexible Wire Size	1.5mm <sup>2</sup>
Rigid Wire Size	1.5mm <sup>2</sup>
Dimensions	86 x 86 x 55, when mounted
Mounting	Wall using supplied backbox
Transmitter and Receiver	
Operating Temperature	0-50°C
Storage Temperature	10-60°C
Protection Rating	IP21

**CHOICE RSTAT3RF**  
Wireless Digital Thermostat



- Bi-Metallic temperature sensing element
- Suitable for surface or switch box mounting
- -5 to 25°C set point range
- Tamper resistant cover fitted with accelerator heater



Power Supply	230 Vac, 50 Hz
Temperature control range	-5 to 25°C
Load rating (1-3)	10A / 250 Vac
Ambient Max	T50
Protection Rating	IP20
Dimensions	78mm x 78mm x 36mm

**CHOICE FSTAT1**  
Frost Thermostat



- 30 meters range to the Receiver
- Economy and Comfort Operation
- Unique RF address to avoid interference
- 24 hour or 7 day programmable
- 6 programmable events per day
- Button press back-lit operation
- Frost protection
- 5-35°C set point range

Transmitter	
Power Supply	4xAAA 1.5V Alkaline batteries
Battery lifespan	1 year
Temperature display range	5-35°C (increment 0.1)
Temperature control range	0- 50°C (increment 0.5)
Program time increment	10 minutes
Temperature accuracy	+/- 1°C
Switching Differential	+/- 0.5°C or +/- 0.1°C selectable
Operating Temperature	0 – 50°C
Clock Accuracy	<1sec / day
Protection Rating	IP30
Dimensions	110 x 104 x 21.5mm
Transmission Frequency	868Mhz
Transmission Distance	80m open, 30m indoors
Mounting	Wall or free standing using table stand
Receiver	
Power supply	230Vac, 50Hz
Contact rating	16A, 250Vac (Volt Free contact)
Insulation class	2
Flexible Wire Size	0.5-1.5mm
Rigid Wire Size	0.5-2.5mm
Dimensions	88 x 88 x 39.4mm
Wall mounting	Industry standard
Complies with	EN60730-1, EN60730-2-7, EN60730-11

**CHOICE RSTAT5RF**  
Wireless Digital Programmable Thermostat



- Easy fixing to all hot water cylinders
- Suitable for use on uninsulated and foam lagged cylinders
- Cylinder strap and hooks provided
- Pipe mounting attachment included



Switch Action	SPPT Type 1CL
Switch Rating	16(4) A, 230 Vac
Sensing Element	Bi-metal
Temperature setting Range	0°C to 90°C
Differential	4°C +2°C
Max Surface Temperature	110°C
Protection	IP40
Fixing	Plastic coated spring wire (1800mm) with hooks

**CHOICE CSTAT**  
Cylinder Thermostat



## POWERSAVER PLUS TIMERS

The primary application for the POWERSAVER+ is to control immersion heaters. In a typical UK household nearly 20% of a home's energy cost is spent on heating hot water. Leaving an immersion heater on all the time can be a significant waste of energy that can drive this figure up to 25% or higher. The automatic control of a POWERSAVER+ can save on fuel expenditure and energy wastage when the user may forget.

Amongst a wide range of applications, the POWERSAVER+ models are also suitable for combi boilers, panel heaters, lighting including LED and towel rails.

The range includes a double pole switched fused option to incorporate an extra isolation feature which separates the live and neutral wires, adding additional safety for high loads.

- 30 Mins, 1 Hour and 2 Hour Boost Function
- Clear Indication LEDs
- Single Gang Surface (Mount Box Included) or Flush Mounting
- Supplied with Replaceable BS1362 13A Fuse
- 13A Switch Rating 240vAC

Power Supply	AC220-240 50/60 Hz
Contact Rating	13A Resistive AC240V
Boost Durations	30 Minutes, 1 Hour or 2 hours
Fixing	Single Pattress – Surface and Flush Mounting
IEC Protection Class	Class II
Temperature Rating	T40
Material	ABS
Operation Temperature	-10°C to 40°C
Fuse Rating	BS1362 13A Fuse
Dimensions	86mm x 86mm x 35mm
Complies with	BS EN60730 BS EN60730

- 30 Mins, 1 Hour and 2 Hour Boost Function
- Clear Indication LEDs
- Single Gang Surface (Mount Box Included) or Flush Mounting
- 16A Switch Rating 240vAC

Power Supply	AC220-240 50/60 Hz
Contact Rating	16A Resistive 240VAC 2A LED Lighting 240VAC
Boost Durations	30 Minutes, 1 Hour or 2 hours
Fixing	Single Pattress – Surface and Flush Mounting
IEC Protection Class	Class II
Temperature Rating	T40
Material	ABS
Operating Temperature	-10°C to 40°C
Dimensions	86mm x 86mm x 35mm
Complies with	BS EN60730



PSPBF WHITE PSPBFS SILVER PSPBFB BLACK

2 Hour Electronic Boost Timer & Fused Spur



PSPB WHITE PSPBS SILVER PSPBB BLACK

2 Hour Electronic Boost Timer





- 24 Hour, 5/2 Day & 7 Day Cycles
- 10 On/Off Programs per Day
- Permanent Memory Reserve
- 15 mins, 30 mins, 1 Hour, 2 Hour, 4 Hour and 6 Hour Boost Function
- Clear Indication Display
- Button Lock Feature
- Summer / Winter time Change
- Single Gang Surface (Mount Box Included) or Flush Mounting
- 16A Switch Rating 240vAC

Power Supply	AC220-240 50/60 Hz
Contact Rating	16A Resistive 240VAC 2A LED Lighting 240VAC
Boost Durations	15 Minutes, 30 Minutes, 1 Hour, 2 Hours, 4 Hours, or 6 Hours
Memory Reserve	Permanently Reserves Settings
Terminals	Suitable for max. 2.5 mm <sup>2</sup> flexible and 4.0 mm <sup>2</sup> fixed cabling
IEC Protection Class	Class II
Temperature Rating	T40
Display	LCD
Material	ABS
Operation Temperature	-10°C to 40°C
Dimensions	86mm x 86mm x 35mm
Complies with	BS EN60730

**PSPS** WHITE    **PSPSS** SILVER    **PSPSB** BLACK

7 Day Time Switch with Boost

- 24 Hour, 5/2 Day & 7 Day Programming
- 10 On/Off Programs per Day
- Permanent Memory Reserve
- 15 mins, 30 mins, 1 Hour, 2 Hour, 4 Hour and 6 Hour Boost Function
- Clear Indication Display
- Button Lock Feature
- Summer / Winter time Change
- Single Gang Surface (Mount Box Included) or Flush Mounting
- Supplied with Replaceable BS1362 13A Fuse
- 13A Switch Rating 240vAC

Power Supply	AC220-240 50/60 Hz
Contact Rating	13A Resistive (3kW) 750W Incandescent, Halogen lighting 500W Fluorescent lighting 200W LED lighting 100W Compact Fluorescent lighting
Boost Durations	15 Minutes, 30 Minutes, 1 Hour, 2 Hours, 4 Hours, or 6 Hours
Memory Reserve	Permanently Reserves Settings
Terminals	Suitable for max. 2.5 mm <sup>2</sup> flexible and 4.0 mm <sup>2</sup> fixed cabling
IEC Protection Class	Class II
Temperature Rating	T40
Display	LCD
Material	ABS
Operation Temperature	-10°C to 40°C
Dimensions	86mm x 86mm x 35mm
Complies with	BS EN60730



**PSPSF247** WHITE    **PSPSF247S** SILVER    **PSPSF247B** BLACK

7 Day Fused Spur Time Switch with Boost



- 24 Hour Programming
- 10 On/Off Programs per Day
- Permanent Memory Reserve
- 15 mins, 30 mins, 1 Hour, 2 Hour, 4 Hour and 6 Hour Boost Function
- Clear Indication Display
- Button Lock Feature
- Summer / Winter time Change
- Single Gang Surface (Mount Box Included) or Flush Mounting
- Supplied with Replaceable BS1362 13A Fuse
- 13A Switch Rating 240vAC

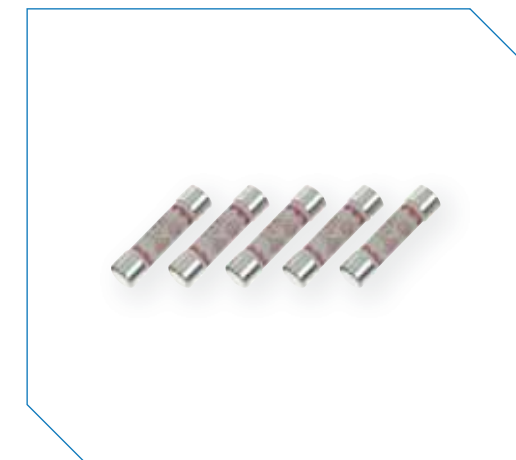
Power Supply	AC220-240 50/60 Hz
Contact Rating	13A Resistive (3kW) 750W Incandescent, Halogen lighting 500W Fluorescent lighting 200W LED lighting 100W Compact Fluorescent lighting
Boost Durations	15 Minutes, 30 Minutes, 1 Hour, 2 Hours, 4 Hours, or 6 Hours
Memory Reserve	Permanently Reserves Settings
Terminals	Suitable for max. 2.5 mm <sup>2</sup> flexible and 4.0 mm <sup>2</sup> fixed cabling
IEC Protection Class	Class II
Temperature Rating	T40
Display	LCD
Material	ABS
Operation Temperature	-10°C to 40°C
Dimensions	86mm x 86mm x 35mm
Complies with	BS EN60730

**PSPSF24** WHITE    **PSPSF24S** SILVER    **PSPSF24B** BLACK

24 Hour Fused Spur Time Switch with Boost



- Spare Fuses for PSPSF4 & PSPSF247
- Packs of 5
- BS1362 13A Fuse



**PSPFUSE**

Powersaver Plus Spare Fuses



### POWERSAVER CONTROLLERS

The primary application for the Powersaver range is to control immersion heaters. In a typical UK household nearly 20% of a home's energy cost is spent on heating hot water. Leaving an immersion heater on all the time can be a significant waste of energy that can drive this figure up to 25% or higher.

Immersion heaters are often rated at 3kw which, if left on permanently, can cost around 13p per hour/ £1.56 per day/ £9 per week/ £450 per year, so it is best to have control of your heating patterns.

Fitting a Sangamo immersion heater controller can reduce these costs by up to 50%, even more if the property can take advantage of a dual tariff electricity and controlled by the Powersaver Dual Flexi.

The Powersaver Boost and Select models are also suitable for LED lighting and towel rails.

- 24 hour, 5/2 day & 7 day selectable
- 10 On/Off Programs per Day
- 30 min, 1 hour & 2 hour multi-press boost function
- Fits directly into a single gang surface box
- Button lock feature
- Summer/winter time change

Power Supply	AC220-240 50/60 Hz
Contact Rating	16A Resistive AC240V 2A LED Lighting AC240V
Fixing	Surface and Flush Mounting
Resolution of Programs	10 Minutes
Live Parts Protection	Enclosure Protection
Dirt and Moisture Protection	IP00
Shock Protection	Class II
Case Material	ABS
Action Type	1B
Temperature Rating	T35
Operation Temperature	-10°C to 40°C
Memory Reserve	Permanent reserve setting
Display	LCD
Dimensions	87mm x 87mm x 35mm
Complies with	BS EN60730



**PSS2**  
Powersaver Select



- 30 mins, 1 hour and 2 hour boost periods
- Switches appliance off automatically after boost period
- Fits directly onto a single gang pattress box

Power Supply	AC220-240 50/60 Hz
Contact Rating	16A Resistive AC240V 2A LED Lighting AC240V
Fixing	Single Pattress – Surface and Flush Mounting
Live Parts Protection	Enclosure Protection
Dirt and Moisture Protection	IP00
Shock Protection	Class II
Case Material	ABS
Action Type	1B
Temperature Rating	T35
Operation Temperature	0°C to 40°C
Dimensions	87mm x 87mm x 35mm
Complies with	BS EN60730

**PSB2**  
Powersaver Boost



- Suitable for single, dual and twin immersion elements
- Pre-set adjustable (ie minimise or cancel) programs for use with low rate tariffs (Economy 7, Economy 10 & Eco20:20)
- Direct upgrade to Horstmann E7 & E7Q and Sangamo Q7 controllers
- 24 hour electronic timer
- Automatic summer/winter time change
- Programmable boost function - 2 hours max

Power Supply	230V +10% / -15%
Frequency	50/60Hz
Power Consumption	1.2W
Contact Rating	13A Resistive 230V Suitable for immersion heaters up to 3kW
Contact Type	Micro-disconnection on control. Disconnection to immersion heater(s) via double pole rocker switch
Memory Reserve	3 years
Timing Accuracy	+/- 0.5 sec per day at +23°C
Operation Temperature	0°C to 35°C
Shock Protection	Class 1
Live Parts Protection	Enclosure Protection
Dirt and Moisture Protection	IP30
Dimensions	169mm wide, 114mm high, 60mm deep (excluding rocker switch & buttons)
Complies with	BS EN60730



**PSDF2**  
Powersaver Dual Flexi 2





## ROUND PATTERN TIME SWITCHES

Sangamo have manufactured the renowned RPTS from our Port Glasgow factory since 1951, having sold over 11 million switches and counting. These 20A switches are famous for their high capacity, quality and reliability.

We often hear from customers who have had switches installed for over 5 decades and often on their second use, having outlived the equipment they were being utilised for.

### S250 STANDARD RANGE

The original RPTS model for those that need simple on & off switching of up to 20A. The dial is 24 hour but contains a Day Omit device which skips the ON operation on selected days of the week. These switches come with either 2 or 3 sets of ON & OFF arms. To set the switch you simply loosen the centre screw, move the arms around the dial to match up with the switching times and re-tighten.

### 3-PIN OR 4-PIN

3-pin switches have common clock & switch connections. 4-pin switches have independent clock & switch connections enabling the use of a different switching circuit voltage, a Volt Free Contact, in effect.



### S250 STANDARD RANGE

**S254.2** Standard 3 Pin Time Switch, 2 On/Offs

**S255.2** Standard 4 Pin Time Switch, 2 On/Offs

**S254.3** Standard 3 Pin Time Switch, 3 On/Offs

**S255.3** Standard 4 Pin Time Switch, 3 On/Offs

Power Supply	230V AC, 50/60Hz
Programming	24 hour programme with ON/OFF operations
Current Rating	20A resistive. More Switching Capacity info on request
Display	24 hour dial
Mounting	Surface
Day Omission	Selectable
Temp Override Facility	Selectable
Cable Size	6.0mm <sup>2</sup>
Timing Accuracy	5 mins/year
Power Consumption	0.6W at 230V
Temperature Range	0° C to 50° C
Live Parts Protection	Enclosure Protection
Type of Protection	IP20
Shock Protection	Class 1 (Product must be earthed)
Dial Calibration	15 min divisions
Setting Accuracy	+/- 3 minutes
Period Between unlike Operations	15 minutes minimum
Period Between like Operations	105 minutes minimum
Dimensions	Height (wall mounted) 136mm, width 105.7mm, projection 82mm, (Total height 146.5mm)
Complies with	BS EN60730

- Programming: 24 hour with on/off operations
- Current Rating: 20A
- Battery Reserve: None
- Day Omit Dial: Yes (Omits the 'ON' operation)
- Temporary override (manual button)





## ROUND PATTERN TIME SWITCHES

Sangamo have manufactured the renowned RPTS from our Port Glasgow factory since 1951, having sold over 11 million switches and counting. These 20A switches are famous for their high capacity, quality and reliability.

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### Q550 STANDARD RANGE

The 'red dial' time switch. Sangamo RPTS with red print on the dial contain a 100 hour battery reserve. These switches offer a wider range of variations and options than the S250 Range.

### 3-PIN OR 4-PIN

3-pin switches have common clock & switch connections. 4-pin switches have independent clock & switch connections enabling the use of a different switching circuit voltage, a Volt Free Contact, in effect.

- Temporary override (manual button)
- Programming: 24 hour with on/off operations
- Current Rating: 20A
- Battery Reserve: 100 hours
- Day omit dial



Power Supply	230V AC, 50/60Hz
Programming	24 hour programme with ON/OFF operations
Display	24 Hour dial
Mounting	Surface
Current Rating	20A resistive. More Switching Capacity info on request
Reserve	100 hrs (providing battery has been charged for 300 hrs)
Day Omission	Selectable
Temp Override Facility	Selectable
Cable Size	6.0mm <sup>2</sup>
Timing Accuracy	5 mins/year
Temperature Range	0°C to 50°C
Live Parts Protection	Enclosure Protection
Dirt and Moisture Protection	IP20
Shock Protection	Class 1 (Product must be earthed)
Dial Calibration	15 min divisions
Setting Accuracy	+/- 3 minutes
Period Between unlike Operations	15 minutes minimum
Period Between like Operations	105 minutes minimum
Day Omit Skips On Operation	Q554, Q555, Q559, Q563, Q586
Day Omit Skips Off Operation	Q557
Dimensions	Height (wall mounted) 136mm, width 105.7mm, projection 82mm, (Total height 146.5mm)
Complies with	BS EN60730

### Q550 STANDARD RANGE

- Q554.2** Standard 3 Pin Time Switch, 2 on/off
- Q554.3** Standard 3 Pin Time Switch, 3 on/off
- Q555.2** Standard 4 Pin Time Switch, 2 on/off
- Q555.3** Standard 4 Pin Time Switch, 3 on/off
- Q555.2110V** 110v Standard 4 Pin Time Switch, 2 on/off
- Q557.2** Standard 4 Pin Time Switch, 2 on/off, omit off operation
- Q557.3** Standard 4 Pin Time Switch, 3 on/off, omit off operation
- Q559.2** Standard 4 Pin Time Switch, 2 on/off, early on on 1 day/week
- Q563.2** Standard 4 Pin Time Switch, 2 on/off Changeover Operations
- Q563.3** Standard 4 Pin Time Switch, 3 on/off Changeover Operations
- Q586.2** Standard 4 Pin Time Switch, 2 on/off Changeover Operations, early on 1 day/week



## ROUND PATTERN TIME SWITCHES

Sangamo have manufactured the renowned RPTS from our Port Glasgow factory since 1951, having sold over 11 million switches and counting. These 20A switches are famous for their high capacity, quality and reliability.

We often hear from customers who have had switches installed for over 5 decades and often on their second use, having outlived the equipment they were being utilised for.

### E850 STANDARD RANGE

Digital RPTS' combine the high capacity and reliability of the electro-mechanical models but provide full 7 day programming, allowing for more complex fixed time program schedules.

The unit is easy & intuitive to program by painting in and wiping out segments on the dial face.

### 3-PIN OR 4-PIN

3-pin switches have common clock & switch connections. 4-pin switches have independent clock & switch connections enabling the use of a different switching circuit voltage, a Volt Free Contact, in effect.

## E850 STANDARD RANGE

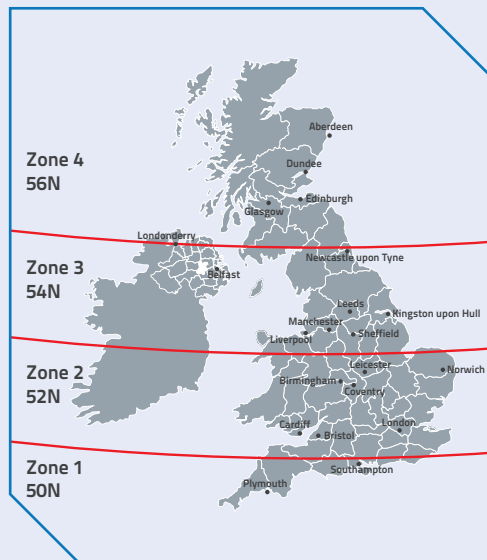
**E854** Digital 3 Pin Time Switch, 96 Operations

**E855** Digital 4 Pin Time Switch, 96 Operations

Power Supply	230V AC, 50/60Hz
Programming	96 Operations
Display	LCD
Mounting	Surface
Current Rating	20A resistive. More Switching Capacity info on request
Reserve	20 days (Rechargeable Battery)
Temp Override Facility	2hr Override On. Advance to Off.
Cable Size	6.0mm <sup>2</sup>
Timing Accuracy	5 mins/year
Holiday Mode	Suspends programs for 14 days, or indefinitely
BST/GMT Changeover	Automatic
Temperature Range	35° C
Live Parts Protection	Enclosure Protection
Dirt and Moisture Protection	IP20
Shock Protection	Class 11 (functional and supplementary insulation)
Period Between ON/OFF Operations	15 mins
Dimensions	Height (wall mounted) 136mm, width 105.7mm, projection 82mm, (Total height 146.5mm)

- Programming: 7 day programme
- Up to 48 on and 48 off (96 operations per day)
- Each day can be programmed independently
- Holiday mode
- Auto BST/GMT changeover
- Current Rating: 20A
- Battery Reserve: 20 days
- Temporary override (manual button)





**Q550 ASTRO/SUNTRACKER**

Astro/Suntracker switches automatically adjust themselves to follow Sunrise/Sunset times throughout the year. This makes them ideal for controlling external and internal lighting loads up to 20A or 3,600W of LED lighting with no need for a sensor.

As these switches track the motion of the sun & not the time it should be set to GMT & left all year, so there's no need to worry about summer & winter clock changes, the switch does it all itself. The month dial controls the brass sunset/sunrise arms automatically to keep the lights switching at the right time each day.

Sunset & Sunrise times vary through the length of the British Isles by as much as 40 minutes at certain times of year. Our RPTS Astro models come in 4 zone variations to make the switching times more accurate. Additionally, users can alter the longitude setting away from the 0° longitude line to focus the accuracy in further, if required.

2 on/off models have a second set of fixed time operating arms, allowing you to set your lighting to go off for a set period overnight while still benefiting from the sunset and sunrise programming.

All models also contain a 100 hour battery reserve.

**3-PIN OR 4-PIN**

3-pin switches have common clock & switch connections. 4-pin switches have independent clock & switch connections enabling the use of a different switching circuit voltage, a Volt Free Contact, in effect.



**Q550 ASTRO/SUNTRACKER**

- Programming: 24 hour with on/off operations
- Current Rating: 20A
- Battery Reserve: 100 hours



Power Supply	230V AC, 50/60Hz
Programming	24 hour programme with ON/OFF operations
Display	Solar dial
Mounting	Surface
Current Rating	20A resistive. More Switching Capacity info on request
Reserve	100 hrs (providing battery has been charged for 300 hrs)
Temp Override Facility	Selectable
Cable Size	6.0mm <sup>2</sup>
Timing Accuracy	5 mins/year
Temperature Range	0°C to 50°C
Live Parts Protection	Enclosure Protection
Type of Protection	IP20
Shock Protection	Class 1 (Product must be earthed)
Dial Calibration	15 min divisions
Setting Accuracy	+/- 3 minutes
Dimensions	Height (wall mounted) 136mm, width 105.7mm, projection 82mm, (Total height 146.5mm)
Complies with	BS EN60730

- Q550.13.11** Astro Zone 1, 3 Pin Time Switch, 1 On/Off, Day Omit skips ON operation
- Q550.13.12** Astro Zone 2, 3 Pin Time Switch, 1 On/Off, Day Omit skips ON operation
- Q550.13.13** Astro Zone 3, 3 Pin Time Switch, 1 On/Off, Day Omit skips ON operation
- Q550.13.14** Astro Zone 4, 3 Pin Time Switch, 1 On/Off, Day Omit skips ON operation

- Q551.13.11** Astro Zone 1, 3 Pin Time Switch, 1 On/Off & optional early off
- Q551.13.12** Astro Zone 2, 3 Pin Time Switch, 1 On/Off & optional early off
- Q551.13.13** Astro Zone 3, 3 Pin Time Switch, 1 On/Off & optional early off
- Q551.13.14** Astro Zone 4, 3 Pin Time Switch, 1 On/Off & optional early off

- Q551.14.11** Astro Zone 1, 3 Pin Time Switch, 2 On/Offs
- Q551.14.12** Astro Zone 2, 3 Pin Time Switch, 2 On/Offs
- Q551.14.13** Astro Zone 3, 3 Pin Time Switch, 2 On/Offs
- Q551.14.14** Astro Zone 4, 3 Pin Time Switch, 2 On/Offs

- Q553.13.11** Astro Zone 1, 4 Pin Time Switch, 1 On/Off & optional early off
- Q553.13.12** Astro Zone 2, 4 Pin Time Switch, 1 On/Off & optional early off
- Q553.13.13** Astro Zone 3, 4 Pin Time Switch, 1 On/Off & optional early off
- Q553.13.14** Astro Zone 4, 4 Pin Time Switch, 1 On/Off & optional early off

- Q553.14.11** Astro Zone 1, 4 Pin Time Switch, 2 On/Offs
- Q553.14.12** Astro Zone 2, 4 Pin Time Switch, 2 On/Offs
- Q553.14.13** Astro Zone 3, 4 Pin Time Switch, 2 On/Offs
- Q553.14.14** Astro Zone 4, 4 Pin Time Switch, 2 On/Offs



### BLUETOOTH DIN RAIL TIME SWITCHES

Bluetooth is a wireless communication protocol that allows programming of the switch using the free APP available on Android and IOS smart phones and tablets. This works the same way as contactless bank cards, oyster travel cards and mobile payment systems. The program is setup on the APP and transfers to the switch when the smart device is held in close proximity.



- Daily and Weekly programming
- Switching capacity 16A per channel
- Zero-crossing, LED up to 600W
- Programmable via App (iOS and Android)
- 10 years battery reserve

Power Supply	230V AC, 50/60Hz
Programming	100 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 3,000W Halogen lamp 3,000W Fluorescent lamp uncompensated 2,600W Fluorescent lamp series compensated 2,600W Fluorescent lamp parallel compensated 1,300W Compact Fluorescent lamp 600W LED 230V AC 600W
Reserve	10 years
Switching Functions	ON/OFF, Pulse, Cycle, Random, Extra On/Off, Permanent On/Off
Memory Locations	100
Minimum Interval	1 min
Program Security	unlimited
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	90 x 36 x 63 mm

#### SC2821PRO4

Standard Bluetooth 2 Module 2 Channel, 7 day Timer, 100 Operations



- Daily and Weekly programming
- Astro (sunrise, sunset) program
- Switching capacity 16A per channel
- Zero-crossing, LED up to 600W
- Programmable via App (iOS and Android)
- 10 years battery reserve

Power Supply	230V AC, 50/60Hz
Programming	100 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 3,000W Halogen lamp 3,000W Fluorescent lamp uncompensated 2,600W Fluorescent lamp series compensated 2,600W Fluorescent lamp parallel compensated 1,300W Compact Fluorescent lamp 600W LED 230V AC 600W
Reserve	10 years
Switching Functions	Astro ON/OFF, Night ON/OFF, Extra On/Off, Permanent On/Off
Offset Astro Switching Time	+/- 90 min.
Memory Locations	100
Minimum Interval	1 min
Program Security	unlimited
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	90 x 36 x 63 mm



#### SC2813PRO4

Astro Bluetooth 2 Module 1 Channel, 7 day Timer, 100 Operations



- Daily and Weekly programming
- Astro (sunrise, sunset) program
- Switching capacity 16A per channel
- Zero-crossing, LED up to 600W
- Programmable via App (iOS and Android)
- 10 years battery reserve

Power Supply	230V AC, 50/60Hz
Programming	100 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 3,000W Halogen lamp 3,000W Fluorescent lamp uncompensated 2,600W Fluorescent lamp series compensated 2,600W Fluorescent lamp parallel compensated 1,300W Compact Fluorescent lamp 600W LED 230V AC 600W
Reserve	10 years
Switching Functions	Astro ON/OFF, Night ON/OFF
Offset Astro Switching Time	+/- 90 min.
Memory Locations	100
Minimum Interval	1 min
Program Security	unlimited
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	90 x 36 x 63 mm



#### SC2823PRO4

Astro Bluetooth 2 Module 2 Channel, 7 day Timer, 100 Operations





## NFC DIN RAIL TIME SWITCHES

NFC (Near Field Communication) is a wireless communication protocol that allows you to program the switch using the free Sangamo Connect app on an Android NFC Smart phone.

This works the same way as contactless bank cards, oyster travel cards and mobile payment systems.

You set the program up on the app and hold the phone next to the switch to read, write or transfer programming times.

- Volt-free 16A changeover contact
- 4 memory locations
- Basic Astro programming
- Works with Android NFC phones for programming
- Battery Reserve: 10 years

Power Supply	230V AC, 50/60Hz
Programming	4 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 2,000W Halogen lamp 2,000W Fluorescent lamp uncompensated 1,000W Fluorescent lamp series compensated 1,000W Fluorescent lamp parallel compensated 550W Compact Fluorescent lamp 200W LED 230V AC 200W
Reserve	10 years
Switching Functions	Astro ON/OFF, Night ON/OFF
Offset Astro Switching Time	+/- 90 min.
Memory Locations	4
Minimum Interval	1 min
Program Security	unlimited (E2-PROM)
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	90 x 36 x 63 mm



### 72102NFC

Astro NFC 1 Module 1 Channel, 24 hr Timer, 4 Operations



- Volt-free 16A changeover contact
- 56 memory locations
- Standard programming
- Works with Android NFC phones for programming
- Battery Reserve: 10 years

Power Supply	230V AC, 50/60Hz
Programming	56 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 2,000W Halogen lamp 2,000W Fluorescent lamp uncompensated 1,000W Fluorescent lamp series compensated 1,000W Fluorescent lamp parallel compensated 550W Compact Fluorescent lamp 200W LED 230V AC 200W
Reserve	10 years
Switching Functions	ON/OFF, Pulse, Extra On/Off, Permanent On/Off
Memory Locations	56
Minimum Interval	1 min
Program Security	unlimited (E2-PROM)
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	90 x 36 x 63 mm

### 72113NFC

Standard NFC 2 Module 1 Channel, 7 day Timer, 56 Operations  
Also available: **72213NFC** (as above with 2 channels)



- Volt-free 16A changeover contact
- 56 memory locations
- Astro programming
- Works with Android NFC phones for programming
- Battery Reserve: 10 years

Power Supply	230V AC, 50/60Hz
Programming	56 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 2,000W Halogen lamp 2,000W Fluorescent lamp uncompensated 1,000W Fluorescent lamp series compensated 1,000W Fluorescent lamp parallel compensated 550W Compact Fluorescent lamp 200W LED 230V AC 200W
Reserve	10 years
Switching Functions	Astro ON/OFF, Night ON/OFF, Extra On/Off, Permanent On/Off
Offset Astro Switching Time	+/- 90 min.
Memory Locations	56
Minimum Interval	1 min
Program Security	unlimited (E2-PROM)
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	90 x 36 x 63 mm



### 72103NFC

Astro NFC 2 Module 1 Channel, 7 day Timer, 56 Operations  
Also available: **72203NFC** (as above with 2 channels)







## DIN RAIL TIME SWITCHES

All Sangamo's DIN Rail mountable time switches are designed for 35mm "Top Hat" rail. Switches come in 1, 2 or 4 modules, each module is 17.5mm wide, which fits the required width in the DIN enclosure.

Using the 25195 USB Hub and Easy Vue software or 25196 USB Hub with bluetooth and connect app programs can be transferred to a 25193 data key and then to one or multiple switches. 1 module switches do not require a Data Key as the fascia can be removed and slotted into the Hub directly.

### Pulse Programming

Short term switching at fixed times. Ideal for school bells, sirens, churches, etc. A burst from 1 second up to 59m 59s can be programmed into the unit. This feature appears on all standard switches.

- Volt-free 16A changeover contact
- 46 memory locations
- Module timer
- Standard programming
- Works with key programming & EasyVUE connect (Key & hub are optional extras)
- Battery Reserve: 10 years

Power Supply	230V AC, 50/60Hz
Programming	46 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	6A Inductive@0.6pf Filament lamp 1,000 W Halogen lamp 1,000W Fluorescent lamp with electronic lamp ballast 500W Fluorescent lamp conventional lamp ballast 400W Compact Fluorescent lamp 300W LED 230V AC 300W
Reserve	10 years
Switching Functions	ON, OFF, Pulse, Permanent On/Off
Pulse Length	00:01 up to 59:59 mm:ss
Memory Locations	46
Minimum Interval	1 min
Program Security	unlimited (E2-PR0M)
Temperature Range	-30° C to +55° C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Class of Protection	2 when installed according to regulations
Dimensions	90 x 36 x 63 mm



72112

Standard 2 Module, 1 Channel, 7 Day, 46 Operations  
Also available: **72121** (as above with 2 channels)



- Volt-free 16A changeover contact
- 46 memory locations
- Standard programming
- Works with key programming & EasyVUE connect (Key & hub are optional extras)
- Battery Reserve: 10 years

Power Supply	230V AC, 50/60Hz
Programming	46 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	6A Inductive@0.6pf Filament lamp 1,000W Halogen lamp 1,000W Fluorescent lamp w/ electronic lamp ballast 500W Fluorescent lamp w/ convent. lamp ballast 100W Compact Fluorescent LA 50W LED 230V AC 50W
Reserve	10 years
Switching Functions	ON, OFF, Pulse, Permanent On/Off
Pulse Length	00:01 up to 59:59 mm:ss
Memory Locations	46
Minimum Interval	1 min
Program Security	unlimited (E2-PR0M)
Temperature Range	-30° C to +55° C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Class of Protection	2 when installed according to regulations
Dimensions	90 x 36 x 63 mm

71111

Standard 1 Module 1 Channel, 7 Day, 46 Operations



- Volt-free 16A changeover contact
- 300 memory locations
- Standard programming
- Works with key programming & EasyVUE connect (Key & hub are optional extras)
- Battery Reserve: 6 years
- Extra functions - special weekly programs, channel key assignment

Power Supply	230V AC, 50/60Hz
Programming	300 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 2,000W Halogen lamp 2,000W Fluorescent lamp uncompensated 1,000VA Fluorescent lamp series compensated 1,000VA More Switching Capacity info available upon request
Reserve	6 years
Switching Functions	ON, OFF, Pulse, Cycle, Extra On/Off, Permanent On/Off
Pulse length - Pulse function (switching time)	00:01 up to 59:59 mm:ss
Pulse Length - Timer (man. switching)	0:00:01 up to 9:59:59 h:mm:ss
Memory Locations	300
Minimum Interval	1 min
Temperature Range	-30° C to +55° C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Class of Protection	2 when installed according to regulations
Dimensions	90 x 36 x 63 mm



25162

Standard 2 Module 1 Channel, Yearly Timer, 300 Operations





- Volt-free 16A changeover contact
- 300 memory locations
- Module timer: Multiple applications from one switch
- Standard programming
- Works with key programming & EasyVUE connect (Key & hub are optional extras)
- Battery Reserve: 10 years
- Extra functions – Channel key assignment, accepts external inputs

Power Supply	230V AC, 50/60Hz
Programming	300 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf
	Filament lamp 2,000W
	Halogen lamp 2,000W
	Fluorescent lamp uncompensated 1,000VA
	Fluorescent lamp series compensated 1,000VA
More Switching Capacity info available upon request	
Reserve	10 years
Switching Functions	ON, OFF, Pulse, Cycle, Permanent On/Off
Pulse length - Pulse function (switching time)	0001 up to 59.59 mm:ss
Pulse Length - Timer (man. switching)	00001 up to 9:59:59 h:mm:ss
Memory Locations	300
Minimum Interval	1 min
Temperature Range	-30° C to +55° C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Class of Protection	2 when installed according to regulations
Dimensions	90 x 72 x 63 mm

**26404**  
Standard 4 Module 4 Channel, 7 Day Timer, 300 Operations



- Simple programming with 15 min captive segments
- Simple to read switching
- Manual override switch 'Permanent OFF/ Automatic/ Permanent ON'
- 100 hour battery reserve

Power Supply	230V AC, 50/60Hz
Programming	Daily
Display	LCD
Mounting	DIN
Current Rating	16A, 2.5amp Inductive @0.6pf
Switching Capacity	Filament lamp Halogen lamp 2,000W
	Fluorescent lamp uncompensated 1,000W
	Fluorescent lamp series compensated 750W LED (230 V-) / CFL 200W
Reserve	100 hrs
Switching Functions	ON, OFF, Permanent On/Off
Switching Operation	96 per day
Program Security	unlimited (E2-PROM)
Minimum Interval	15 min
Temperature Range	-5° C to +50° C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	65 x 18 x 90 mm

**11002**  
Standard 1 Module 24 hr Timer



These switches automatically adjust their sunset & sunrise times based on where you are. This can be set one of two ways;

**LOCATION** selecting the nearest city to you

**POSITION** by inputting your co-ordinates; Setting the nearest whole longitude & latitude.

**ASTRO/SUNTRACKER**

**71101** Astro 1 Module 1 Channel, 7 Day, 60 Operations

**72101** Astro 2 Module 1 Channel, 7 Day, 60 Operations

**72201** Astro 2 Module 2 Channel, 7 Day, 60 Operations

Power Supply	230V AC, 50/60Hz
Programming	60 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	Filament lamp 2,000W
	Halogen lamp 2,000W
	Fluorescent lamp uncompensated 1,000VA
	Fluorescent lamp series compensated 1,000VA
	more Switching Capacity info available upon request
Reserve	6 years
Switching Functions	Astro ON/OFF, Night ON/OFF, Extra ON/OFF
Memory Locations	60
Offset Astro Switching Time	+/- 90mins
Minimum Interval	1 min
Program Security	unlimited (E2-PROM)
Temperature Range	0° C to 50° C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Class of Protection	2 when installed according to regulations
Dimensions	71101: 45x17.5x58mm. 72101,72201: 45 x 35 x 58 mm.

- Volt-free 16A changeover contact
- 60 memory locations
- Astro timer
- Simple programming
- Works with key programming & EasyVUE (Key & hub are optional extras)
- Battery Reserve: 6 years
- Key not required for 71101





## PANEL TIME SWITCHES

The panel time switch range can also be surface or din rail mounted.

The analogue 16000 range are simple to use and are a cost effective timer. They are extremely easy to set, change and to view programmes. They are often used where multiple people are involved in setting and changing programs. For instance in church halls and similar applications. They are also fitted where the potential user is not comfortable using the latest digital technology, preferring the traditional pin type setting.

The 28000 range provides additional functionality in the same format to suit additional programming requirements.

### Pulse Programming

Short term switching at fixed times. Ideal for school bells, sirens, churches, etc. A burst from 1 second up to 59m59s can be programmed into the unit. This feature appears on all standard switches.

- Volt-free 16A changeover contact
- 300 memory locations
- Programmable via App (iOS, Android and Windows)
- Battery Reserve: 10 years
- Comes ready for panel or surface mounting

Power Supply	230V AC, 50/60Hz
Programming	Daily, Weekly, or Astro
Display	LCD Back-lit
Mounting	Optional
Current Rating	16A
Switching Capacity	16A / 250 V – at cos = 1 6A with inductive load cos = 0.6 Filament Lamp, Halogen Lamp 400W Fluorescent Lamp with electron. lamp ballast 100W Fluorescent Lamp with convent. lamp ballast 100W LED (230V-)/CFL 50W
Reserve	10 years
Switching Functions	ON, OFF, Pulse, Cycle, Extra, Permanent, Astro
Pulse length - Pulse function (switching time)	0001 up to 59.59 mm:ss
Pulse/Pulse Length Cycle	0.00.01 up to 9:59:59 h:mm:ss
Memory Locations	300
Minimum Interval	1 min
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Class of Protection	2 when installed according to regulations.
Switchboard flush mounting	Retaining clip in 68 x 68mm cutout
Dimensions	72 x 72mm



### SC4411PRO4

Astro Bluetooth 1 Channel 7 Day Digital Panel Timer  
Also available: [SC4421PRO4](#) (as above with 2 channels)



- Voltage free 16A changeover contact
- Suitable for Surface, Panel or Din rail mounting
- 100 hour battery reserve
- Programming by 15 min captive segments
- Manual override with automatic return to program
- Contact status display

Power Supply	230V AC, 50/60Hz
Programming	24 hour
Display	Analogue
Mounting	Optional
Current Rating	16A
Switching Capacity	Resistive load 16A 250V Voltage free inductive load (cos = 0.6) 2.5A 250V Incandescent lamp 2000W 250V
Reserve	100 hour
Switching Operations	96 per day
Temperature Range	-10°C to +50°C
Storage Temperature	-10°C to +50°C
Connection by cage terminals, section of conductors	0.5 to 4 mm <sup>2</sup>
Insulation class	2
Protection	IP20
Dimensions	72 x 94.5 x 48.4 mm (Face 72 x 72mm)
Complies with	BS EN 60730

### PA16621

Standard Panel 24 hr Timer (with battery)  
Also available: [PA16622](#) (as above with no battery)

- Voltage free 16A changeover contact
- Suitable for Surface, Panel or Din rail mounting
- 100 hour battery reserve
- Programming by 1 hour captive segments
- Manual override with automatic return to program
- Contact status display

Power Supply	230V AC, 50/60Hz
Programming	7 Day
Display	Analogue
Mounting	Optional
Current Rating	16A
Switching Capacity	Resistive load 16A 250V Voltage free inductive load (cos = 0.6) 3A 250V Incandescent lamp 1000W 250V Squirrel-cage motor 350W 250V
Reserve	100 hour
Switching Operations	24 per week
Temperature Range	-10°C to +50°C
Storage Temperature	-10°C to +50°C
Connection by cage terminals, section of conductors	0.5 to 4 mm <sup>2</sup>
Insulation class	2
Protection	IP20
Dimensions	72 x 94.5 x 48.4 mm (Face 72 x 72mm)
Complies with	BS EN 60730



### PA16921

Standard Panel Mount 7 Day Timer with Battery  
Also available: [PA16922](#) (as above with no battery)

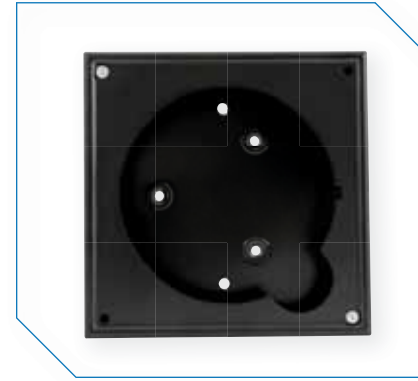


**143602**  
Module Enclosure

- 1-2 module
- IP40 protection
- 55 x 135 x 80mm
- Surface mounted
- Integral DIN-rail
- Compatible with 1 or 2 module: 11002, 71111, 72112, 72212, 72113NFC, 72213NFC, 25162, 71101, 72201, 72102NFC, 72103NFC, 72203NFC

**143603**  
Module Enclosure

- 3-4 module
- IP40 protection
- 100 x 135 x 90mm
- Surface mounted
- Integral DIN-rail
- Suitable for 2 module product applications where Contactor will be used.



**110469**  
FD930 Conduit Box Time Switch

- Will accept 3/4in or 20mm conduit
- Fixings supplied
- Robust steel construction with black enamelled finish
- Compatible with S250, Q550 & E850 ranges



**25193**  
Programming Data Key

- Data key for use with digital time switches that have key programming feature
- Used to load settings on single or multiple sites where the same product type is used
- Compatible with models ; 72101, 72201, 72112, 72212, 23871, 23872, 25162, 26404
- Not required for 71101, 71111



**143541**  
Module Enclosure

- 4-6 module
- IP40 protection
- 140 x 135 x 90mm
- Surface mounted
- Integral DIN-rail
- Compatible with 26404



**25196**  
Programming Interface

- The Easy Vue Hub with Bluetooth can be used to program your switch with a blank programming key via PC, using the Easy-Vue software, or Android smartphone, using the Sangamo Connect app
- Compatible with models ; 71101, 72101, 72201, 71111, 72112, 72212, 23871, 23872, 25162, 26404