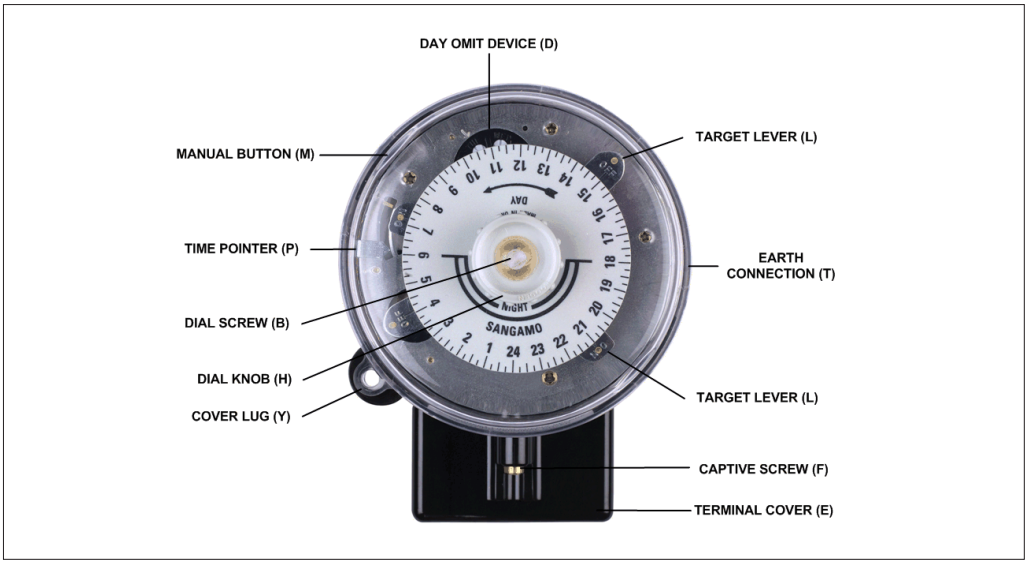
SANGAMO RPTS S250&Q550

Electromechanical Round Pattern Switch
STANDARD Installation & User Instructions

S254 and S255

Q554, Q555, Q557, Q559, Q563 and Q586

Before attempting to install the Sangamo Time Switch, please read these instructions carefully.

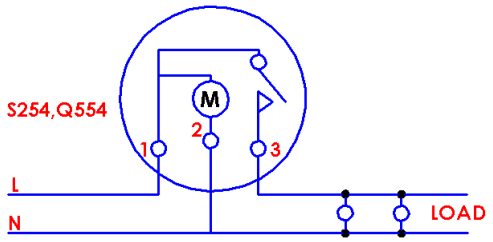


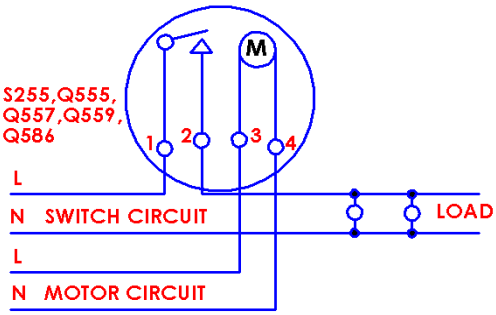
Introduction

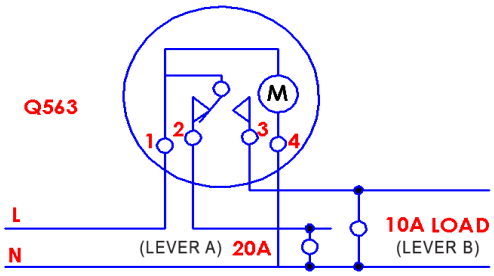
These installation and user instructions cover ALL STANDARD VARIANTS in the S250 & Q550 series – a range of reliable and highly accurate 24-hour time switches which offer, according to the specific model, a range of features suited to individual applications.
See Quick Reference Chart later.

Installation

1. The installation of this time switch should be carried out by a qualified electrician in accordance with current IEE wiring regulations.
2. Sangamo cannot be held responsible or liable for circuit connection other than those directly associated with our products.
3. To comply with safety requirements it is recommended that the time switch be installed with the base provided.
4. Terminals are for fixed wiring only. 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.
5. The time switch must be earthed.
6. This product is suitable for 'Ordinary' conditions only. It is not protected against dripping or moisture and so should be housed in a suitable IP rated enclosure.
7. **DO NOT REMOVE THE 2 SCREWS AT REAR OF SWITCH BASE.**
8. Rotate cover anticlockwise and lift clear.
9. Remove extended terminal cover (E) by unscrewing captive screw (F).
10. Withdraw plug-in mechanism from switch base, by grasping & pulling firmly on the dial.
11. Clear plastic from three fixing holes provided, removing debris.
a. Use no8 wood screws or 2BA counter-sunk screws for fixing.
b. Fix with suitable wall plugs for the surface intended.
c. When mounting the time switch on a metal surface, ensure the metal is adequately earthed to cover the 20A rating in accordance with IEE Regulations.







12. Strip back insulation by 6mm to ensure satisfactory connection with terminals. Connect switch to supply and load as in wiring diagrams above.
13. **For S255, Q555, Q557, Q559 & Q586 WHERE SEPARATE MOTOR & SWITCH CIRCUIT SUPPLIES ARE NOT AVAILABLE – FIT A LINK BETWEEN TERMINALS 1 & 3.**
14. Connect earth lead to earth connection (T).
15. Plug mechanism into base.
16. Cut & trim breakouts in the extended terminal cover E as necessary if wiring routed on the surface. Refit extended terminal cover (E) to base using captive screw (F). This will lock the mechanism inside the base.
17. Follow setting instructions for the time switch then refit cover.

Setting Standard 24 Hour Dial

1. Remove dial screw (B) and pull dial free from the mechanism. This makes adjustment easier.
2. Turn dial knob (H) CLOCKWISE slightly until levers (L) are movable. Set levers to the operating times required. Re-tighten knob (H).
a. The lever (L) nearest the mechanism operates the day omitting device and should be used to set the 1st on (Q557 – 1st off) for the day.
b. To convert a 2on/2off dial to a 1on/1off dial, sequence the levers such that there is an:
On lever set at the required time
On lever following
Off lever set at the required time
Off lever following or
Turning dial knob (H) CLOCKWISE fully to release, lift away dial face, remove the top set of on/ off levers & washers. Replace the dial face and dial Knob (H).
c. Minimum setting period between On & off levers is 15 minutes.
d. Minimum period between consecutive on & off levers is 105 minutes.
e. Each small division on the dial represents 15 minutes.
f. Q559 & Q586 ONLY - For early operation switches the hinged lever must be set 180 minutes after normal lever (L), preceding it and 105minutes before normal lever (L), following it.
g. Q559 & Q586 ONLY – where two normal pairs of on & off levers are fitted, the early operation is effective for one pair of only.
3. Refit dial onto mechanism ensuring dial hub engages cross-pin on centre shaft. Refit dial screw (B) . Turn dial in direction of the arrow until pointer (P) indicates the correct time of day.

Setting Day Omit Device when fitted

1. Day omitting device (D) prevents 'On' operation (Q557 – prevents 'Off' operation) occurring on a chosen day or days of the week.
2. To OMIT operations on a given day, turn insert (1) clockwise on a given day , with a screwdriver, until ARROWHEAD POINTS OUTWARDS.
3. On Q563 models were levers are marked (A) & (B), this device omits (B) lever operations.
4. Ensure dial is showing the correct time. Note the position of the lever (L) nearest the mechanism which operates the day omitting device (D) once every 24 hours.

If this lever has PASSED the Day omitting device (D) – turn black disc so the CURRENT day is set. If this lever has NOT REACHED the Day omitting device (D) – turn black disc to the PRECEDING current day.

Early Operation when fitted

1. Day lever (E) in conjunction with special hinged lever fitted to the dial, enable a particular switching operation to be made at an earlier pre-set time on one day of the week.
2. To set day lever (E), slacken screw (S) and adjust lever until 'U' shaped portion is at appropriate day.
3. Set special hinged lever to the time required.

See 'Setting Standard 24 Hour Clock'.

Quick Reference Chart

MODEL	DIAL	TEXT	BATTERY	OMIT	BASE PINS	SWITCH TYPE	SPECIFICS	MAX OPS
S254	STD	BLACK	NO	ON	3	SPST		4 OR 6
S255	STD	BLACK	NO	ON	4	SPST		4 OR 6
Q554	STD	RED	YES	ON	3	SPST		4 OR 6
Q555	STD	RED	YES	ON	4	SPST		4 OR 6
Q557	STD	RED	YES	OFF	4	SPST		4 OR 6
Q559	STD	RED	YES	ON	4	SPST	EARLY 'OFF' ON ONE DAY	4
Q563	STD	RED	YES	ON	4	SPDT		4 OR 6
Q586	STD	RED	YES	ON	4	SPST	EARLY 'ON' ON ONE DAY	4

Specification

Current, Voltage, Frequency	As shown on product identification label
Ambient Temperature	0-50 deg C
Live Parts	Enclosed
Shock Protection	Class 1
Dirt & Moisture Protection	IP20
Contacts	Micro-Disconnection
Battery Reserve (Q550 series only)	100 hours (fully charged). NiMH rechargeable cell. The battery is soldered into a PCB. After the battery's expectancy life of 10 years the timeswitch will cease to operate or run slow, depending on the environment. A battery replacement kit is available to order.
Cycle/Channel	24 hour/1 channel
Summer/Winter Time Change	No
Clock Accuracy	+/- 5mins per year @ 23 degC (Quartz)
Max Cable Size	6.0mm sqr
Power Consumpton	0.6W
Noise	A perpetual ticking noise is produced as internally a stepper motor drives the gear train.

SERVICE AND WARRANTY

Guarantee : As shown on product identification label. Any tampering or misuse will invalidate this guarantee.

This product must meet Waste Electronic and Electrical Equipment Regulations (WEEE) for suitable environmental recycling, recovery and/or disposal. End of life products should be handled in line with local regulations. Alternatively return End of life product to Sangamo for correct disposal.

CUSTOMER CARE POLICY

As part of Sangamo's continuous improvement program, the Company operates a Customer Care Policy. This means that we welcome your comments and complaints, as it can help us to improve our services to you, our customer.

Due to our policy of continuous product improvement and development, the specifications in this guide may be subject to change without prior notice.

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Sangamo Limited
Industrial Estate, Port Glasgow,
Renfrewshire, PA14 5XG

Tel: 01475 745131 Fax: 01475 744567
Email: enquiries@sangamo.co.uk
Web: www.sangamo.co.uk

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