# SANGAMO

**Round Pattern Time Switch** Electronic Installation & User Instructions



E854 and E855

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

## Introduction

These installation and user instructions cover all E850 MODEL VARIANTS - A range of reliable and highly accurate 7 day time switches.

## 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. 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 if required.

## 6. DO NOT REMOVE THE 2 SCREWS AT **REAR OF SWITCH BASE.**

7. Rotate cover anticlockwise and lift clear. 8. Remove extended terminal

cover (A) by unscrewing captive screw (B). 9. Lift handle (C) and withdraw

plug-in mechanism from switch base, by pulling.

10. Clear plastic from three fixing holes provided, removing debris.

a. Use no8 wood screws or 2BA countersunk screws for fixing so screw heads sit flush inside base.

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.



# E854

11. Strip back insulation by 6mm to ensure satisfactory connection with terminals. Connect switch to supply and load as in wiring

diagrams above. 12. For E855 WHERE SEPARATE MOTOR **& SWITCH CIRCUIT SUPPLIES ARE NOT** 

#### AVAILABLE – FIT A LINK BETWEEN **TERMINALS 1 & 3.**

13. Plug mechanism into base. 14. Cut & trim breakouts in the extended

terminal cover (A) as necessary if wiring routed on the surface. Refit extended terminal cover (A) to base using captive screw (B). This will lock the mechanism inside the base. 15. Follow setting instructions for the time switch then refit cover with lug (Y) in position as shown.



Important: The unit may be configured 'off power' if sufficient charge remains in its rechargeable battery.

MOTOR CIRCUIT

Press 'Set On' for 5 secs to activate display.

If there is sufficient charge in the battery the normal operating display will be shown and you can 'Set the Clock' & 'Programme' the unit off power. The display will disappear & conserve the battery after 90 secs without a button press.

If LED segments are flashing - the battery is fully discharged. Power to unit is required to continue. Press 'Set Clock' and follow 'Setting the Clock' instructions overleaf.

## Normal Operating Mode

The 24hour analogue display shows programmed switching 'On'periods, represented by means of electronic markers and an analogue 'hand' showing the time on the 24-hour analogue clock.

A preset switching 'On' period from 7 am to 5 pm is automatically programmed into the time switch memory. See programming section to adjust.

The digital display comprises a 12-hour digital clock and electronic markers to show PM, day of week, date and month.

## **Setting the Clock**



#### Follow the sequence of steps below,

1. Set Minutes	: Press SET Adjust by (+) or (	4. Set Month: Press SET Adjust by (+) or (-)
2. Set Hours:	Press SET Adjust by (+) or (	5. Set Date: Press SET Adjust by (+) or (-)
3. Set Year:	Press SET Adjust Bar by r or	6. Press SET to return switch to normal condition.

Note: setting the clock will cancel an override.

#### Programming the Time Switch

There is standard 'On' period from 7.00 am to 5.00 pm, Mon-Sun memorised into the product. Programming the time switch to a time other than that is achieved by 'painting in' or 'wiping out' 'On' markers as the analogue hand is moved around the 24-hour clock display in either direction using the + or - buttons.



5. Copy Program:	For $\underline{same}\xspace$ program in next and subsequent days, memorise program with		UT SET PROG
	For <u>different</u> program in next day, memorise program with <b>SET</b> <u>PROG</u> <u>not</u>	COPY DAY	

Notes: Press Set Prog as required to skip to required day. Pressing Set prog memorises a days program.

Analogue hand starting point is 0:00 LED flashing indicates programming neutral mode.

Press + or - to reach the time you require before programming. Press set ON or set OFF twice will bring unit back to programming neutral mode.

Programming is in 15 minute increments as viewed on the Digital display; 15, 30, 45, 00.

The Analogue display segment resolution is 30 minutes.

So program periods at 15 or 30 = one segment, 45 or 00 = next segment.

# **Programme Review**

1. Select Day: Press REVU repeatedly to review daily programs.

2. Review Program Settings: Press + or + Exact switching times shown on digital clock as 'hand' crosses On/Off periods 3. Return to Normal Condition: After reviewing Sun, press REVU

Note: Programs may be reviewed during programming by pressing REVU Programs may be amended in review by SET PROG

### Override

1. Press button situated on outside of switch to override;

If 'On', channel switches 'Off' until next 'On' period

If 'Off', switches 'On' for 2-hours.

2. Cancel override by pressing button again.

### Holiday Mode / Permanent OFF

1. Press and hold for approx 5 secs

- 2. Press to increment holiday value, or till 'HOL' indicates permanent off. (+
- নি 3. Press to decrement holiday value
- 4. Press SE. to enter holiday mode. PROC

SF to terminate holiday/ permanent off program 5. Press ON

## Reset

The unit can be reset back to the default settings simply by pressing the + and - keys simultaneously until the full display occurs. Continue pressing + and - keys and press set clock, revu & copy to reset the unit.

#### Specification

No. of Output Channels :	1 programmed channel.
Programming Capability:	7-day programmable.
Max. No of Status Changes :	Up to 48 On/Off operations per day.
Override Facility :	Temporary off or 2 hour, 'Boost-On'.
Digital Display :	12 hour display to 1 minute resolution.
Analogue Display :	24-hour display with 30 minute programme indication and 15 minute switchng.
Battery Back-Up :	Rechargeable battery will retain memory typically - 20 days after 6 days power 11 days after 24 hours power
Holiday Mode :	Suspends program for up to 14 days.
Ambient Temperature Range :	0 to 35 deg C.
Current Voltage, Frequency :	As shown on identification label.
Max. Cable Size :	6.0 mm.
BST/GMT Changeover :	Automatic.
Accuracy :	Better than 5 minutes per annum.
Protection :	Live Parts - Enclosed i.e. this timer is totally protected by the enclosure. Direct Protection - Normal domestic dust deposits only. Moisture Protection - Ordinary i.e. has no special protection against moisture. Shock Protection - Class 11, both functional and supplementary insulation.
Mounting :	Surface
Software Class :	Class A
Contacts :	Type 1B disconnection

#### 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 renvironmental 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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