ES1247B16A

16 Amp 1 Channel Multi Purpose Programmer

Installation Instructions

Thank you for choosing ESi Controls.

All our products are tested in the UK so we are confident this product will reach you in perfect condition and give you many years of service. However, for additional peace of mind, we recommend you register your product online at **www.esicontrols.co.uk/warranty** for your extended warranty.

Technical Data

Contact Rating	16(4) Amp 230VAC
Supply	230V 50/60 Hz a.c.
Switch Rating	230V AC, (4) A SPDT
Fixing	Industry Standard - Surface and Flush Mounting
Resolution of Programs	10 Minutes
Power Consumption:	10VA Maximum
Insulation Class	Double
Enclosure Protection	IP30
Case Material	Thermoplastic, Flame retardant
Wiring	For Fixed wiring only
Temperature Rating	T35
Operation Temperature	0°C to 35°C
Display:	LCD Program
Clock	24Hr or 12Hr selectable with 1 minute resolution
BST/GMT Time Change	Automatic
Clock Accuracy	+/- 1 Sec a day
Program Selectable	Auto, On, Off, All Day or Boost
Program On/Off per day	2 On/Off or 3 On/Off Operations selectable
Program Cycle	24 Hour, 5/2 Day or 7 Day selectable
Boost Settings	1,2 or 3 hour user selectable boost
Category	Normal

Installation safety instructions

The 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 instructions before proceeding.

Ensure that the fixed wiring connections to the mains supply is via a fuse rated at not more than 20 amps and class 'A' switch having a contact separation of a minimum of 3mm in all poles. Use appropriate cable size for maximum load.

No earth connection is required as the product is double insulated but ensure continuity of earth throughout the system. To facilitate this, an earth park terminal is supplied on the back plate.

If the unit is fitted to a metal surface, **IT IS ESSENTIAL** that the metal be earthed. **DO NOT** use a surface mounting box.

Maintenance

Always isolate the mains supply before commencing any work, servicing or maintenance on the system. And please read all instructions before proceeding.

Arrange for an annual maintenance and inspection schedule to be carried out by a qualified person on every part of the heating and hot water system.

> **WARNING:** *Always isolate the AC mains supply before installing. This product must be fitted by a competent person, and installation must comply with the guidance provided in the current editions of BS767 (IEE wiring regulations) and part "P" of the building regulations.*

Technical settings

Setting the Installer Settings

1. Move the slider to **RUN**. Hold down the ☖ **Home** button, the **Copy** Button and **+** (plus) button (under the facia) together for 3 seconds to enter the Installer Setting Mode.

2. The LCD display will show **C0dE**. Press the **+/–** buttons to enter the first digit of the code. Press the **Day** button to move to the next digit. Repeat this until all 4 digits have been entered and then press the **Next ▶▶** button.

N.B. Only when the code entered matches either the pre-set or master code can the landlord settings be entered. The factory default code is 0000.

3. When the code has been entered press the **Next ▶▶** button and if the code has been entered correctly, the LCD will show **ProG**. Press the **+/–** key to select the desired program, choose between:

   Prog 0: Functions as a standard 1 Channel Programmer.

   Prog 1: When the ESI124716A has been set to program 1, the time switch becomes a simple to use Electronic Boost controller with a single button operation, offering three user-selectable boost periods of 1 hour, 2 hour or 3 hours.

   Prog 2. If program 2 is selected, then this allows the user to boost the power as above, but also allows the installer to set On and Off times. Once the On/Offs have been set, all other functions apart for the standard 1, 2, 3 hour boost all other functions are locked.

Prog 3. Program 3 allows the installer to set the On and Off times and all other functions including the boost, will be disabled.

4. Press the ⌂ **Home** button or wait for 15 seconds to automatically confirm and return to Run Mode.

Programme / Functions	Prog 0	Prog 1	Prog2	Prog 3
Set Time / Date	Yes	Yes	Yes	Yes
Set Programme Times	Yes	No	No	No
Boost 1/2/3 Hour	Yes	Yes	Yes	No
Advance	Yes	No	No	No
Holiday	Yes	Yes	Yes	Yes
Run Programme	Yes	No	Yes	Yes
Change Auto/On / Off / Run	Yes	No	No	No

Setting the Programmer Settings

1. Move the slider to **RUN**. Hold down the ⌂ **Home** button, the **Day** button and the **– (minus)** button (under the facia) together for 3 seconds to enter the Technical Setting Mode.

2. Press **+/–** to choose between 2 or 3 ON/OFFs per day.

3. Press the **Next ▶▶** button and press **+/–** to choose between Protection ON/OFF. (If Protection is ON and the system does not call for heat for one week, the system will be turned ON for one minute each week that the system does not call for heat).

4. Press the **Next ▶▶** button and press **+/–** to choose between 12-hour clock or 24-hour clock.

5. Press the **Next ▶▶** button and press **+/–** to choose between Std (standard time with the changeover at 2.50am) or ECON (economy time with the changeover at 00.00am, midnight).

6. Press the ⌂ **Home** button or wait for 15 seconds to automatically confirm and return to Run Mode.

Setting the Landlord Service Interval
1. Switch the slider to **RUN**.

2. Press ⌂ **Home**, **Copy** and the **+** buttons together to enter the landlord settings. A numeric password will be required to enter these settings.

3. The LCD display will show **C0dE**. Press the **+/−** buttons to enter the first digit of the code. Press the **Day** button to move to the next digit. Repeat this until all 4 digits have been entered and then press the **Next ▶▶** button.

N.B. *Only when the code entered matches either the pre-set or master code can the landlord settings be entered. The factory default code is 0000.*

4. The LCD display will show **ProG**. Press the **Next ▶▶** button and the LCD will show **En**. Press the **+/−** buttons to turn the landlord functions on/off.

5. If landlord functions are turned on, press the **Next ▶▶** button and the LCD display will show **SHO**. Select on and the LCD will display **ArEA** and this will allow a contact number to be entered. Press the **+/−** buttons to set the area code for the maintenance telephone number. Press the **Day** button to move to the next digit. Repeat this until all digits have been entered and then press the **Next ▶▶** button.

6. The LCD display will show **tELE**. Press the **+/−** buttons to set the maintenance telephone number. Press the **Day** button to move to the next digit. Repeat this until all digits have been entered and then press the **Next ▶▶** button.

7. The LCD display will show **duE**. Press the **+/−** buttons to set the due date (from 1 - 450 days).

8. Press the **Next ▶▶** button and the LCD display will show **ALAr**. Press the **+/−** buttons to set the reminder (from 1 - 31 days). This will then remind the user when the annual service is due by alternating between displaying **SER** and the maintenance telephone number in the LCD screen according to these settings.

9. Press the **Next ▶▶** button and the LCD display will show **tYPE**. Press the **+/−** buttons to choose between: -

    0: Reminds the user when the annual service is due by alternating between displaying **SER** and the maintenance telephone number in the screen according to installer set settings.

    1: Reminds the user when the annual service is due by alternating between displaying **SER** and the maintenance telephone number in the screen according to installer set settings and only allows the system to run in manual operation for 60 minutes.

    2: Reminds the user when the annual service is due by alternating between displaying **SER** and the maintenance telephone number in the screen according to installer set settings and does not allow the system to run (permanently OFF).

10. Press the **Next ▶▶** button and the LCD display will show **nE**. Here a new installer code can be entered. Press **+/−** to set the first digit, then press the **Day** button. Repeat this for all four digits. Press the **Next ▶▶** button to confirm the changes and the LCD display will show **SET** to confirm.

11. Press the ⌂ **Home** button or wait for 15 seconds to automatically confirm and return to Run Mode.

Fitting the Back Plate

1. Position the wall-plate (terminals along top edge) with 60mm (min) clearance to its right, 25mm (min) above, 90mm (min) below. Ensure that the supporting surface will fully cover the back of the programmer.

2. Offer the back plate to the wall in the position where the programmer is to be mounted, remembering that the back plate fits to the left side of the programmer. Mark the fixing positions through the slots in the back plate, drill and plug wall, then secure back plate in position.

3. All necessary electrical connections should now be made. Ensure that the wiring to the wall-plate terminals leads directly away from the terminals and is completely enclosed within the wall-plate aperture. Wire ends must be stripped and screwed to the terminals so that minimal bare wire is showing.

To enter a New Installer Code

1. Move the slider to **RUN**.

2. Press Home, Copy and the **+** buttons together to enter the landlord settings. A numeric password will be required to enter these settings.

3. The LCD display will show **C0dE**. Press the **+/−** buttons to enter the first digit of the code. Press the **Day** button to move to the next digit. Repeat this until all 4 digits have been entered and then press the **Next ▶▶** button.

N.B. Only when the code entered matches either the pre-set or master code can the landlord settings be entered. The factory default code is 0000.

4. The LCD display will show **ProG**. Continue to press the **Next ▶▶** button until the LCD will show NE 0000. Press the **Day** button and the first digit will flash, then use the **+/–** buttons to choose a new code using the **Day** button to move between digits.

5. When the desired code is entered correctly, press **Next ▶▶** button to confirm changes.

6. Press ⌂ **Home** button to exit the menu.

Wiring diagram

N	N	L	L	SL Load	SL Load		
				(ON)	(ON)		

ESi™ ES1247B16A IP30 CE Max Load: 3500W 16(4) Amp 230 VAC 0 753677 551275 V1.1 2017

Commissioning

Switch on the mains supply. Referring to pages 4, 8, 9 and 13 of the **User Instructions:**

1. Use the buttons to ensure correct product functionality.

2. Set timing and programme details in accordance with customer requirements.

3. Normally the unit will be left with channel in 'Auto' mode.

4. Set backlight either permanently ON or OFF in accordance with customer requirements.

We are continuously developing our products to bring you the very latest in energy saving technology and simplicity. However, should you have any questions setting up your controls please email us at **sales@esicontrols.co.uk.**

WARNING: Interference with sealed parts renders the guarantee void.

In the interests of continuous product improvement we reserve the right to alter designs, specifications and materials without prior notice and cannot accept liability for errors.

ESi

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