R447 EURO DUAL COIN OPERATED ELECTRONIC TIMER

1.0 INTRODUCTION

The R447 is an electronic coin operated electricity timer for the control of electrical energy. It is intended for use where the supply of electricity is timed according to the applied tariff and credit. Applications include control of lighting in snooker halls, squash courts, launderettes and patio heaters. Or any other circustances where electricity is applied where chargable time is required.

The design is such that electricity consumption is timed and monitored electronically and this and many parameters are under software control. Information is displayed on a 16 Character Liquid Crystal Display (LCD).

The timer will have been delivered as a dual coin operated timer. Four versions are available which can cope with :- **Sterling** £ & (p) pence, **Dollar** $ & (c) cents, **Euro** € & (c) cents and **Tokens**. These instructions cover all versions irrespective of the coinage ordered. For ease of understanding all denominations will be classified as "COINS".

2.0 R447 FEATURES

Credit is added by inserting coins into the coin slots. The default message on the display indicates the remaining credit.

The Light Emitting Diode (LED) below the display flashes when a load is connected and at a rate of 1000 pulses per kWh of energy consumed. The remaining credit is updated and continuously displayed. When the credit falls to zero, the load is disconnected from the electricity supply.

All parameters and data can be displayed by activating a combination of switches as described below.
SW2 = Reduce (-) Credit and / or Rate.
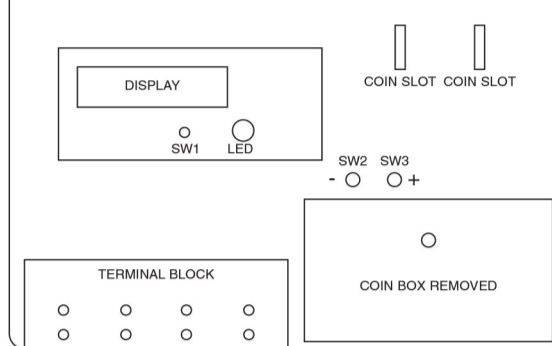SW3 = Increase (+) Credit and / or Rate.

FIGURE 1   THE R447 EURO DUAL COIN TIMER

3.0 DEFAULT MESSAGES

The timer will normally display the amount of credit in minutes in the form:

CREDIT = 000.0 minutes   to   CREDIT = 999.9 minutes

A short time after the credit has fallen to zero and the timer has turned off the supply to the load, the following message will be displayed:

CREDIT USED UP

If the amount of credit exceeds the limit set by the owner then the display will show the message:

EXCESS CREDIT

4.0 PUBLIC INTERROGATION SWITCH

The switch button below the display, labelled SW1 in Figure 1, allows the consumer to obtain further information. Using a narrow blunt object press once to obtain a reading of the applied tariff expressed in minutes per € Euro:

RATE = 000.0 minutes/€ to   RATE = 999.9 minutes/€

Pressing the switch a second time the displayed message gives the total electrical energy in kWh used from the time the timer was manufactured:

USED = 00000.00 kWh to   USED = 99999.99 kWh

The switch can be pressed once more to bring the displayed message back to its default credit reading. Alternatively the display will revert automatically to the default reading after 30 seconds.

5.0 PRIVATE MODE SWITCHES

The private mode switch buttons, shown as SW2 (decreasing credit and / or rate) and SW3 (increasing credit and / or rate) in Figure 1, are located behind the coin box. They are only accessible by removing the coin box.

The three switches SW1, SW2 and SW3 allow the owner to obtain more information and to adjust various parameters. Use a narrow blunt object to operate the switches.

Press either SW2 or SW3. The displayed message will change to:

PRIVATE MODE

Press SW1 once and the message will read:

CREDIT = 000.0 minutes   to   CREDIT = 999.9 minutes

It is now possible for the owner to adjust the credit by pressing SW3 to increase the reading or SW2 to decrease. These switch actions exhibit accelerated clocking. To slow down the rate of change, release and press each button again to obtain an accurate adjustment as required. If a tournament is to take place create enough credit to allow for the time required.

Press SW1 again. The message will now read:

RATE = 000.0 minutes/€ to   RATE = 999.9 minutes/€

The required value can now be set by means of SW2 and SW3 as described earlier.

Press SW1 again. The message will now read:

USED = 00000.0 kWh to   USED = 99999.99 kWh

This displays the accumulated energy consumption since the timer was manufactured. This is not adjustable.

Press SW1 again. The message will now indicate the accumulated total number of coins of each value since the meter was commissioned. Initially before any coins have been inserted these messages will not appear. Coin count messages are shown in the form:

€1 COUNT = 0000   to   €1 COUNT = 9999   €1 coin count

€2 COUNT = 0000   to   €2 COUNT = 9999   €2 coin count

Token   COUNT = 0000   to   Token   COUNT = 9999

This is not adjustable.

Press SW1 again to view the coin count for the second coin if applicable.
Press SW1 again. The message now shows the value assigned to a Token.

Token = 000.0 minutes   to   Token 999.9 minutes

Any value between these limits can be assigned using switches SW2 and SW3.

Press SW1 again. The message changes to:

MAX CREDIT = 000 minutes to   MAX CREDIT = 999 minutes

This parameter is adjustable and sets a limit on the maximum credit. This causes the default display message to change, when too many coins are put into the meter, to:

EXCESS CREDIT

The switch can be pressed twice more to bring the displayed message back to its default credit reading. Alternatively the display will revert automatically to the default reading after 30 seconds. It is advisable to empty the cash from the cash box as often as possible.

6.0 INSTALLATION OF THE TIMER

The installation of the timer must be undertaken by a competent qualified electrician, to a standard that satisfies the requirements of the current Institute of Electrical Engineers (IEE) regulations. The work must be passed by a member of the National Inspection Council for Electrical Installation Contractors (Approved Contractor).

The timer must be positioned to ensure that it will not come into contact with water, adverse heat, steam, extreme dampness or any other substance that will damage the timter or cause the timer to malfunction. This could, if not observed infringe your 2 year guarantee.

First insert a suitable round headed (4mm x 20mm) screw into the wall and leave the screw head proud by 11mm. Hang the timer by the fixing feature at the rear of the timer.

Make sure that the timer is level. Secure the timer with two more screws inserted into the fixing points located behind the sealable terminal cover.

Figure 1 shows the elctrical connections to be made.

7.0 COMMISSIONING THE TIMER

After installation the owner can perform simple tests to ensure that the timer is functioning correctly. The various parameters can then be adjusted as required.

Ensure that the electricity supply is connected and the timer is displaying a message.

Remove the coin box to allow access to the switches SW2 and SW3.

Follow the instructions given in Section 5 and apply a small amount of credit using SW3. The internal switch should operate and the supply should be connected to any load e.g. a light. Reduce the credit using SW2 and ensure that the timer turns off the supply to the load.

Alternatively, credit can be added by inserting a coin. This credit can then be reduced back to zero using SW2.

Follow the instructions given in Section 5 to adjust the Tariff, Maximum Credit and any free Credit required.

Replace the coin box.

The timer is now ready to use.

Please note that coins inserted into the incorrect slots will not register.

2 Year Guarantee