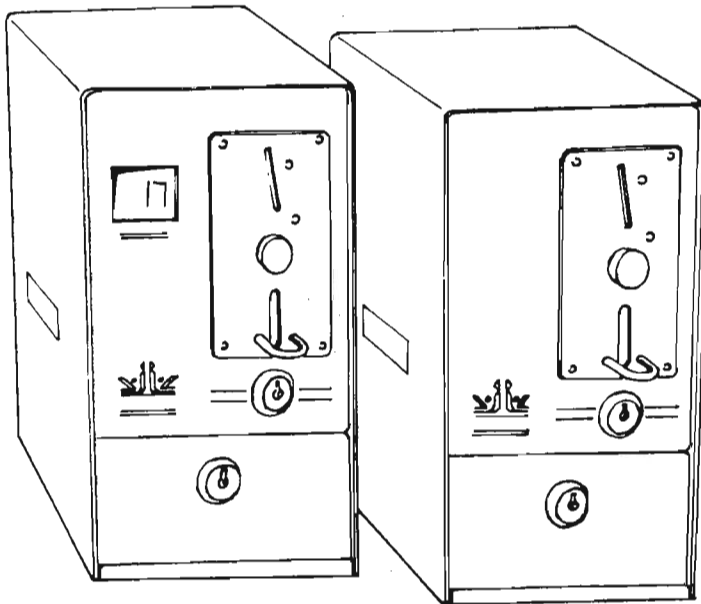




PERADON

Installation and
Operation Instructions for



TIMESAFE BILLIARD TIMING METERS



SCT & ADM WITH & WITHOUT COIN COUNTER

1. INTRODUCTION

The Timesafe meter has been designed using modern technology to give an extremely reliable unit. The modular construction allows for easy servicing when required. The meter is simple to install and requires no maintenance other than regular emptying of the cash box. Two versions are available, SCT for single coin use, and type ADM. for accumulative coin use.

The operating characteristics as defined by BS-EN60730 are type 1B. The meters comply to the latest EMC and Low Voltage directives, meeting EN60730-1:92, EN50082-1:92, EN55014:93, and EN60555-2:87.

5871 SCT TIMESAFE- NON ACCUMULATOR

Single Coin Operation with match play key switch. Does not accept further coins until light time has elapsed.

5872 ADM TIMESAFE - ACCUMULATOR

Single Coin Operation with match play key switch and digital time remaining display. Coins can be inserted at any time and the lighting time will accumulate.

The above two meters are also available with coin counters, which for security reasons keep a permanent read-out of the number of coins inserted. The part numbers are as follows:

5876 SCT-CC TIMESAFE METER

5877 ADM-CC TIMESAFE METER

2. INSTALLATION - All models

The meters are designed as independently surface mounted controls, and can be corner mounted either way unless it is a coin counter version when only right hand mounting is possible. Ensure ambient temperature of 40°C is not exceeded.

Before installing meter ascertain which model type and options are being installed (see section 5).

- i. Lay the meter on its back and unlock and remove the cash box.
- ii. See figure 1. Using a No. 1, 9 inch pozidrive screwdriver remove the recessed screw and remove the front panel by pulling towards base as far as possible, lifting bottom edge slightly outwards and then lifting panel upwards. **IMPORTANT.** It is essential that panel recess is clear of case lip before attempting to lift panel out. Rotate front panel and withdraw 9 way connector from printed circuit board thus separating front panel from the meter case. Set programming switches (section 3) and place panel in a safe place.
- iii. Position the case on the wall and mark the top centre fixing position. Plug the wall and fit with No. 8 or 10 screw of not less than 22mm. Hang case on screw and tighten, use a spirit level to ensure the case is perfectly level. Mark the bottom two screw positions, remove case and plug the holes.
- iv. Remove the cable knockouts as required and fix to the wall. **If the case is not level the coin mechanism may malfunction.**
- v. Using a fused double pole switch for the mains input, wire the unit as shown in Fig 2. **IMPORTANT.** Use cable of crosssectional area not less than 1.0sq. mm and fuse at 5A. The use of 20mm conduit is recommended (use male thread adaptor with lock-ring e.g. Ega type EMA 1ZM). Alternatively fit a 20mm nylon compression cable gland to provide strain relief.

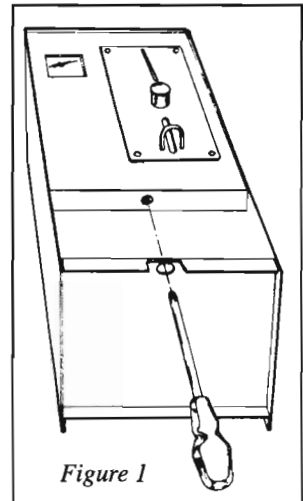


Figure 1

WARNING!

THE EARTH TERMINAL MUST BE CORRECTLY CONNECTED TO A KNOWN EARTH

ENSURE EARTH WIRE IS ADEQUATELY TRAPPED BY THE TAGS OF THE CLAMPING WASHERS

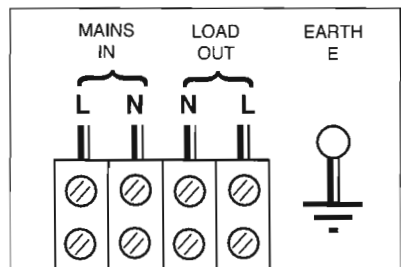


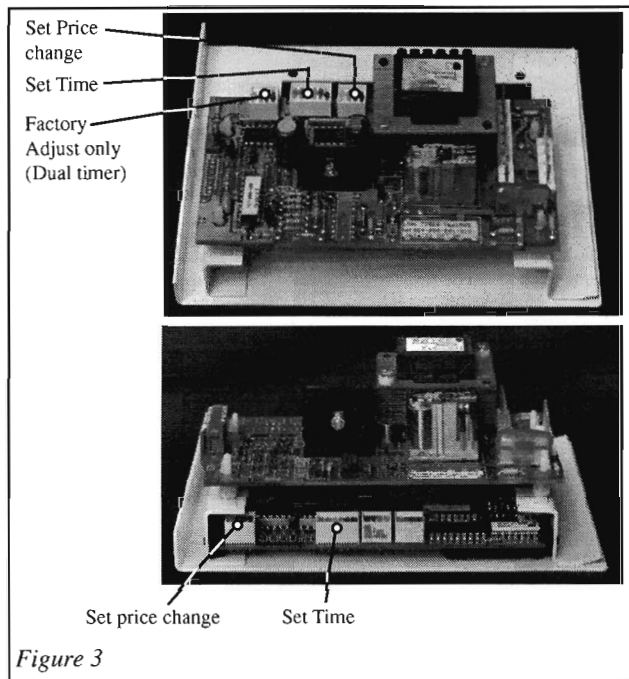
Figure 2

- vi. Refit front panel, make sure the 9 way connector is the right way round, there is a polarising pin to assist in this. Replace the recessed screw, making sure the screw head is flush with the front panel but not overtightened.
- vii. Insert cash box and lock. **MAKE A NOTE OF THE KEY NUMBER AND PUT ONE KEY IN A SAFE PLACE.**
- viii. Switch on and test for correct operation, see section 5.

NEVER OPERATE THE UNIT WITH THE FRONT PANEL UNSECURED OR WITH THE CASE UNEARTHED.

3. SETTING TIME DELAY - All models

The adjustment for time delay per coin is located on the rear of the front panel and consists of a 6-way switchbank. This switchbank is located on the top printed wiring board for type SCT and the lower printed wiring board for type ADM. See Figure 3.



TO SET TIME PERIOD	
SW NO.	TIME (MINS)
1	1
2	2
3	4
4	8
5	16
6	32

eg for 15 minute period

Switch nos 1,2,3,4= 1+2+4+8 = 15 minutes

Figure 4

Delays of between 1 minute and 63 minutes are selectable in 1 minute steps and are obtained by correct positioning of the six switches as shown in Figure 4. Times are additive and the correct delay is obtained by adding the appropriate minutes related to each switch.

IMPORTANT

NEVER ATTEMPT TO ADJUST TIME SETTING WITHOUT FIRST DISCONNECTING MAINS SUPPLY.

4. OPERATION

IMPORTANT - NEVER OPERATE UNIT WITH FRONT PANEL UNSECURED OR WITH CASE UN-EARTHED.

1. Models SCT - Single Coin Type

With the mains off a bar will cross the coin slot preventing the insertion of coins. When mains is applied this bar will be removed. On the insertion of the appropriate coin the bar will reappear preventing further coins being added and the load will be switched on permanently. On returning the switch to the vertical position the meter will be reset to the zero time condition.

2. Models ADM - Accumulative Coin Type

With the mains off the display in top left hand of the meter will be blanked.

NOTE: Coins may be inserted under these conditions but will be lost (and not recorded if coin counter option is fitted).

On applying mains the display will indicate 00. When a coin is inserted, the display will indicate time selected and the load switched on. The display will count down in one minute steps until zero is reached when the load is switched off. Further coins may be inserted at any time in the timing sequence and the display will indicate total time remaining. The meter will operate up to 999 minutes (approx 16½ hours) before the meter resets to zero.

The timing circuit may be overridden by the key operated matchplay switch located below the coin mechanism. To override insert key and turn to the right. The display will be blanked and the load switched on. Any coins inserted (although counted if the coin counter option is fitted) will be lost, on returning the switch to the vertical position the meter will be reset to the zero time condition and the display will indicate 00.

3. Coin Counter Option

This option provides a permanent readout of total number coins inserted when the mains supply is on. Coins inserted when the mains supply is disconnected will not be recorded. The display is located on the left hand side of the case. Total amount is 99999 coins after which the counter will return to 00000.

5. REPAIRS AND FAULT FINDING

In case of failure the front panel may be removed and completely replaced or individual units replaced. If the coin counter fails the complete module is replaced by withdrawing the printed wiring board from the side of the case and unplugging the 3-way connector. Replacement is the reverse of the above. In all cases it is not necessary to remove the control unit from the wall.

To replace the top printed wiring board on the front panel, unplug all connectors and then for each corner in turn squeeze the board support tension flange between two fingers, whilst simultaneously lifting the corner upwards. The replacement board is snapped over the top of the supports.

The bottom printed wiring board (if fitted) is simply withdrawn by sliding the board out of its guides and replacement is the reverse, taking care not to damage the ribbon cable and ensuring that the board is pushed fully home onto the stops.

The following table is a guide to diagnosing faults that may occur:

REMEDY	FAULT	REMEDY	FAULT
SCT METERS		ADM METERS	
Lockout does not release (coin cannot be inserted)	Replace in turn until fault cured:- 1. Lock-out mechanism (use 4BA spanner) 2. PWA	Display indicates 00 but does not count up (and coin not recorded if coin counter fitted)	Replace coin mechanism and/or micro switch
Load switch on permanently (but coins recorded when inserted if coin counter fitted)	Replace PWB	Display indicates 00 and does not count up (but coins are recorded if coin counter is fitted)	Replace in turn until fault cured:- 1. Bottom PWB 2. Top PWB
Load not switched on (and coins not recorded if coin counter fitted)	Remove connectors from coin mechanism micro-switch assembly. Short connectors together if unit then switches on replace microswitch, if not replace PWB.	Display counts up and load switches on but does not count down to zero after token inserted	Replace bottom PWB
Load fails to switch off after time interval	Replace PWB	Display appears to function correctly but load permanently on	Replace in turn until fault cured:- 1. Top PWB 2. Bottom PWB
Incorrect or erratic timing	Check setting of timing switch, if correct replace PWB	Display blank and load not on (but coin counter functions if fitted)	Replace bottom PWB
		Display blank and load on	Check matchplay switch. If correct replace bottom PWB
		Display blank and load not on (and coin counter fails to function if fitted)	Replace top PWB
		Display fails to read 00 when mains power applied	Replace bottom PWB
		<u>Units fitted with Coin Counter Option.</u> Meter operates but does not record coins inserted	Replace coin counter module

IMPORTANT - DO NOT ATTEMPT TO REMOVE FRONT PANEL WITHOUT FIRST DISCONNECTING MAINS SUPPLY

6. SPECIFICATIONS

Input voltage	240V 50Hz standard
Dimensions	Height: 250mm (9.8 in) Width: 145mm (5.7 in) Depth: 150mm (5.9 in)
Weight	3.75 kgm (8.3 lb)
Case material	18 SWG mild steel phosphated and coated with white epoxy polyester powder
Switching capacity	1 K VA maximum
Power consumption	All types less than 10W at 240V 50Hz (no load)
Time intervals	1 minute to 1 hour 3 minute in 1 minute increments

IMPORTANT - THE TIMESAFE METER IS INTENDED FOR INDOOR USE ONLY

Although Timesafe billiard timing meters are strong and reliable, they are obviously targets for vandalism. Peradon, therefore recommend that coin boxes are emptied every evening, after play has finished, and the coin box left open.

Designed and Manufactured in Great Britain exclusively for Peradon



PERADON

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