



PERADON

Installation and Operation
Instructions for



TIMESAFE

ADM BILLIARD TIMING METER



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. 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.

2. INSTALLATION

The ADM Timesafe meter is designed as an independently surface mounted control, and can be corner mounted either left or right. It should not be installed in locations where the ambient temperature exceeds 40°C.

- i. Lay the meter on its back and unlock and remove the cash box.
- ii. See Figure 1. Using a No. 1, nine 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 nine way connector from printed circuit board thus separating front panel from the meter case. Set programming switches (as shown in 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. If the case is not level the coin mechanism may malfunction.
- iv. Mark the bottom two screw positions, remove case and plug the holes. Remove the cable knockouts as required and fix to the wall.
- v. Using a fused double pole switch for the mains input, wire the unit as shown in Figure 2. **IMPORTANT** Use cable of cross-sectional 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.

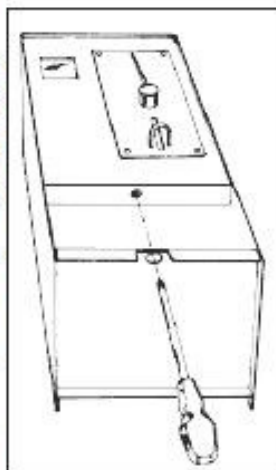


Figure 1

NOTE. To avoid irreparable damage to the unit if loads greater than 4.5A are connected to the ADM Meter a non-resettable 5A fuse is fitted. If this fuse is blown it should be replaced by a competent technician or returned to the factory for replacement.

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**

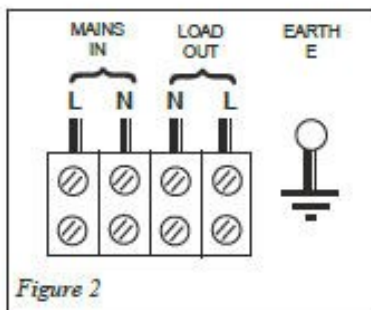


Figure 2

- vi. Refit front panel, make sure the nine way connector is the right way round, there is a polarising back to assist correct insertion. Do not force connector to fit wrong-way round. 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

The adjustment for time delay per coin is located on the rear of the front panel and consists of a seven way switch bank located on the printed circuit board. See Figure 3.

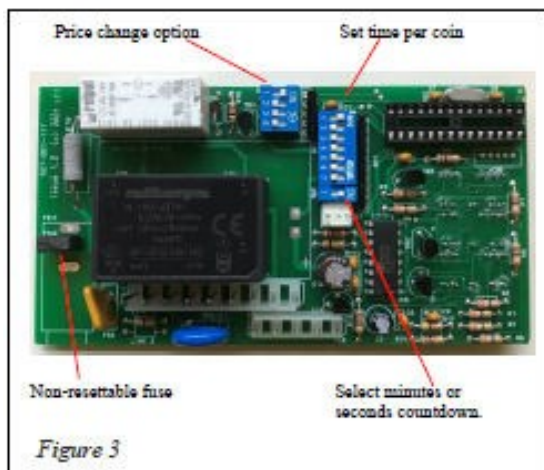


Figure 3

TO SET TIME PERIOD	
Switch No.	Time Period
1	1
2	2
3	4
4	8
5	16
6	32
7	64

Example set for 15 minutes

Switch numbers 1,2,3,4 ON
= 1+2+4+8 = 15 minutes

Figure 4

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

A facility is incorporated to select timing countdown in minutes or seconds. Countdown in minutes is the default option. To select countdown in seconds move switch to the OFF position.

NOTE. The price change option is not fitted to ADM Timesafe meters.

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.

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

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 over-ride insert key and turn to the right. The display will be blanked and the load switched on. Any coins inserted 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.

5. REPAIRS AND FAULT FINDING

In case of failure the front panel may be removed and completely replaced or individual parts replaced. In all cases it is not necessary to remove the control unit from the wall.

To replace the printed wiring board simply withdraw by sliding the board out of its guides and replacement is the reverse ensuring that the board is pushed fully home onto the stops.

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

FAULT	REMEDY	FAULT	REMEDY
Load switched on permanently	Replace Main PCB	Display indicates 00 but does not count up	1. Replace coin mechanism and/or switch assembly 2. Replace main PCB
Load not switched on	Remove connectors from coin mechanism switch assembly. Short connectors together If unit then switches on replace switch assembly, if not replace PCB.	Display count: up and load switches on but does not count down to zero after token inserted	Replace main PCB
Load fails to switch off after time interval	Replace main PCB	Display appears to function correctly but load permanently on	Check matchplay switch. If correct replace main PCB
Incorrect or erratic timing	1. Check not set for seconds mode. 2. Check setting of timing switch, if correct replace PCB	Display blank and load not on	Replace main PCB
Display fails to read 00 when mains power applied	Replace main PCB	Display blank and load on	Replace main PCB
		Display blank and load not on (and coin counter fails to function if fitted)	Replace main PCB

IMPORTANT

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

6. SPECIFICATIONS

Input voltage	100 - 240V 50/60Hz
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	1kVA maximum
Power consumption	All types less than 10W at 240V 50Hz (no load)
Time intervals	1 minute to 127 minutes in 1 minute increments

IMPORTANT - THE ADM TIMESAFE METER IS INTENDED FOR INDOOR USE ONLY

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

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Designed and Manufactured in Great Britain exclusively for Peradon



PERADON

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