

## Emergency Credit – Prepayment Mode

In the event the tenant / user is unable to purchase new cards and once the normal credit level falls below £/€ 1, pressing the red button will provide the user with £/€3 credit. An 'E' will appear on the display indicating emergency credit has been invoked. The tenant / user will be able to use all of the £/€ 3 until the meter will disconnect the supply. When supply is disconnected, the meter will show **dt 3.00E** indicating that £/€ 3+ of credit will be need to be added prior to the meter reconnecting the supply. Please see example below:

Display on meter	Cr 0.50	Cr 3.50E	Cr 2.90E / dt C 0.10E	dt 3.00E	Cr 2.00
Action/ Meaning	£/€ 0.50 in credit	Display after button	£/€ 0.60 used (£/€0.10 of EC used)	All EC used	Add £/€ 5 of new credit

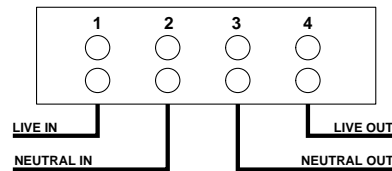
## Installation and Connection

**NOTE:** The installation of this device must only be undertaken by a suitably trained and qualified electrician; all local safety standards must be observed. All work must satisfy Building/IEE Wiring regulations in force at the time. Work must be passed by an approved NICEIC member.

**Fixing** - The meter is intended to be used within an indoor environment and must be positioned away from sources of water, excess heat and humidity. If installing outside, the meter must be fitted within a weatherproof meter cabinet or similar IP rated box.

Mounting points are provided as shown on the fitting template provided. Follow the template instructions for screw positions. Initially, the meter should be hung from the top bracket using a suitable round head screw such that the head fits snugly under the hanging point. Once hung, the meter should be screwed to the wall securely using the two fixing points located under the meter terminal cover.

**Wiring** - The meter must be protected against overcurrent. This is normally as part of the building installation (Service fuse to BS1361) or equivalent; maximum current through the meter must not exceed 100Amps. The meter is wired using the connections found under the grey terminal cover as shown here on the right.



**Product Support** - For further support or service please contact your local stockist or contact:

[www.universalmeterservices.co.uk](http://www.universalmeterservices.co.uk)



**Universal**  
Meter Services

## Operating Instructions

### Card Prepayment Meter/Timer - Model: EMA1.z+MP21.Z1

Before use please read these instructions carefully

Thank you for purchasing a Digicard card operated meter. These instructions are intended to provide information on the installation, operation and programming of the meter. Please keep for future reference.

This meter is designed to be used for the control of the electricity supply in Utility or secondary metered sites such as Holiday and Landlord accommodation. The meter is fully approved to the European metering standard, MID (Metering Instruments Directive). The meter is therefore tested and approved as accurate for billing purposes. The meter may also be used as a time controller.

### Basic Features

The meter is designed to work with either pre-charged disposable or re-chargeable cards, depending upon the level of infrastructure chosen. Pre-charged cards have a single value, and can be used only once after which they are of no further use. After a rechargeable card is used it can be returned to a point of sale for re-charging with any value.

The meter is programmed by using a programming card in conjunction with the red and blue buttons at the top of the meter. The programming function allows the energy prices and standing charge to be set, whilst a debt collection facility enables a pre-set amount to be collected daily. The total amount for collection is programmed and the meter will reduce this each day by collecting monies from the remaining credit balance.

Additional card types are available to support a variety of functions including new tenancy and servicing. Please contact your supplier for further information.

An electronic display indicates the amount of credit remaining on the meter. This display is also used when programming energy prices, and other meter settings. The grey push button next to the display allows the tenant / user to cycle through a set of displays showing usage totals, charges, etc.

A timer mode allows the meter to be used for the control of appliances and services. The time period is set using a charged value card.

The consumption of energy can be seen using the red LED light below the display. The light flashes 1000 times for every 1kWh of energy used.

## User Display Operation – Prepayment Mode

### Normal Operating Display

The meter's default display shows the amount of credit or debt remaining to the user. For example: **Cr 3.50** means a credit of £3.50 or €3.50 is remaining. When all credit has been used the word **OFF** is shown on the screen and the supply is disconnected.

When a value card is introduced to and accepted by the meter, the card's value is added to the meter's credit, and the display momentarily shows **CArd NN** where NN is the card value, before returning to show the remaining credit or debt.

### Display Cycle

The display cycle allows the user to look at their energy readings, prices and meter settings. It can be stepped through using the grey push button to the left hand side of the display. The example below describes the display cycle sequence.

<b>t 00001.45 kWh</b>	Total energy recorded by the meter since manufacture
<b>dt C 2.50</b>	Debt to Clear – Amount of emergency credit used, will be deducted from next payment. Only shown when emergency credit has been used.
<b>r1 00001.45 kWh</b>	Energy Register for Rate 1. Amount of energy used at the Rate 1 price
<b>r2 00000.00 kWh</b>	Energy Register for Rate 2. Amount of energy used at the Rate 2 price. NOTE: This display will only appear if the meter has been set for a 2 rate tariff where a different price is applied for part of the day e.g. night use in Economy 7 type tariffs.
<b>r1 022.78</b>	Price charged in pence/eurocents. The credit value will be reduced by this value each time a kWh is consumed (while Rate 1 is active)
<b>r2 015.93</b>	Price charged in pence/eurocents for each kWh consumed (while Rate 2 is active). See Note above.
<b>st ch 25.00</b>	Amount of standing charge being collected each day in pence/eurocents
<b>dt ch 01.00</b>	Debt Charge. Amount being collected through debt collection each day. Value is in £/€
<b>dt t 015.00</b>	Total amount of debt to be collected in £/€. Will reduce each day by the amount set in the Debt Charge register until reduced to zero

### Programming

The programming display cycle is accessed when a programming card is introduced to and accepted by the meter, whereupon a test display with all the display segments visible is shown. The A button (red) can now be used to step through the display cycle and the B button (blue) used to make changes to the displayed values. For values which can be modified pressing the B button will increment the flashing digit, and button A will move to the next digit.

NOTE: Modified values are used by the meter when it reverts to the normal display. This occurs if neither button is pressed for 30 seconds, or the complete display cycle has been stepped through and **End** is shown.

## Programming Display Cycle

The example below describes the programming display sequence.

<b>Func 1</b>	† *	Function setting to switch between electricity prepayment and timer mode. 1=Electricity Prepayment, 0=Timer Mode (see section below)
<b>PC 0010</b>	† *	Program Counter - Number of times the meter has been programmed. For information only, cannot be changed.
<b>t Cr 0029</b>	† *	Total Credit- Total amount of cash accepted by the meter in £/€. For information only. Value is reset if meter cleared.
<b>CLEAr n</b>	† *	Allows the meter to be cleared e.g. for next occupant. Remaining Credit, debt, and emergency credit values are cleared if set to yes - setting 'y'.
<b>run 00:10</b>	†	Timer Mode Run Time – sets the amount of time in hours and minutes the meter will run for each £/€ of credit accepted.
<b>15:35</b>	*	Clock Time - allows the clock time of meter to be adjusted in 24hr clock format. Note, meter does not automatically correct for daylight saving.
<b>01.01.13</b>	*	Date – allows the date to be set in the meter.
<b>r1 00:00</b>	*	Start time when the rate 1 price becomes active in 24hr clock time.
<b>r2 00:00</b>	*	Start time when rate 2 price becomes active. If rate 1 and rate 2 start times are the same only rate 1 pricing is active, and rate 2 is not in display cycle.
<b>Fh n</b>	*	Friendly hours – Prevents disconnection in rate 2 period. Y=enabled n = disabled
<b>r1 022.78</b>	*	Rate 1 Unit price - Price in pence or eurocents charged for each kWh consumed when rate 1 active
<b>r2 015.93</b>	*	Rate 2 Unit Price - Price in pence or eurocents charged for each kWh consumed when rate 2 active
<b>st ch 25.00</b>	*	Standing charge – Amount to be collected every day as a standing charge. Set as pence/eurocents per day value.
<b>db t 015.00</b>	*	Total debt to be collected – meter can automatically collect an outstanding debt amount set in the meter. Enter the total to be collected in £/€
<b>dt ch 01.00</b>	*	Amount of debt collected each day – used in conjunction with the total debt setting. The meter automatically reduces the remaining credit by the amount set in £/€ per day until the total debt value is reduced to zero
<b>r1 00423.45 kWh</b>	*	For information – Rate 1 energy register
<b>r2 00023.78 kWh</b>	*	For information – Rate 2 energy register
<b>t 00447.23 kWh</b>	*	For information - Total energy recorded by the meter since manufacture

\* In prepayment mode programming display cycle † In timer mode programming display cycle

**Timer Mode** - In timer mode the meter's default display shows the time remaining to the user. For example: **00.05.35** means there is 5 minutes and 35 seconds remaining. When the timer reaches zero the word **OFF** is shown on the screen and the supply is disconnected. There is no user display cycle in timer mode.