



# 1p3w kWh Meter with Communication



## DEM730P

### Installation Guide

#### 0 Warnings & Precautions

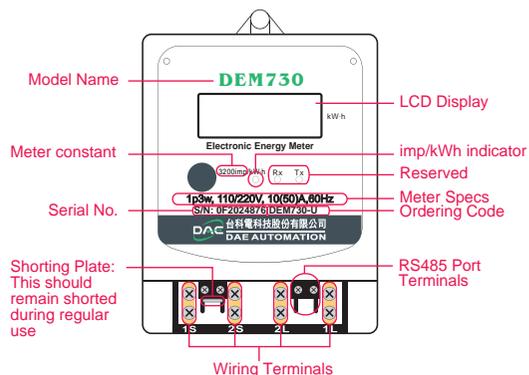
##### Danger

To prevent the risk of electric shock, turn off all sources of electrical power to the device during installation or wiring.

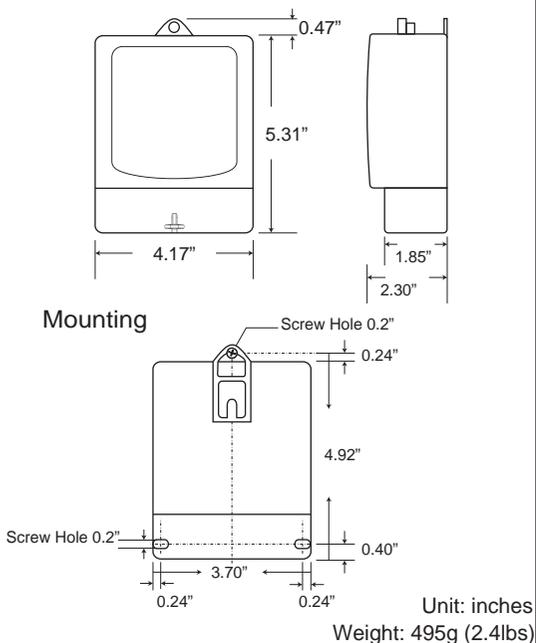
##### Warnings

- Install only by a qualified and trained personnel.
- Follow these instructions accordingly, otherwise damage may occur to the device.
- Follow electrical rules and regulations in the selection of wire materials and gauges.
- Avoid having oil, water, metallic powder or other foreign substances enter the device.
- Avoid using the device in environments where it will be exposed to steam, corrosive, or flammable substances; which can cause short circuits, fires, or explosions.

#### 1 Front Panel



#### 2 Dimensions

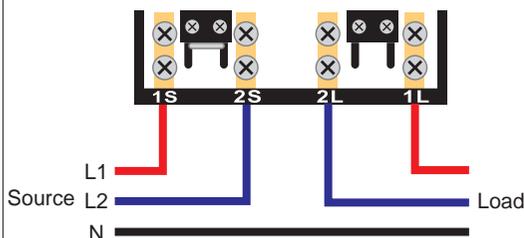


#### 3 Terminals

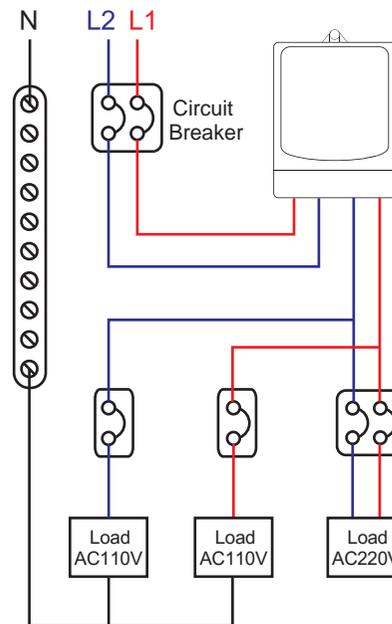
Power Cable: <High Voltage>

1. Please use wire size and type in accordance with electrical regulations
2. Make sure that the wires are screwed tightly to their terminals.

**\*Note: 6 AWG is the largest wire size that can pass through the hole**



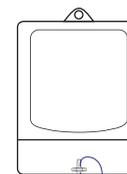
#### 4 Wiring Diagram



#### 5 Lead Seal

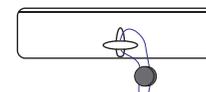
##### Step 1

Loop the copper strand through the hoop



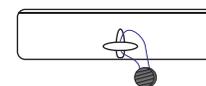
##### Step 2

Thread the copper strand through the lead seal



##### Step 3

Crimp tight using electrical pliers

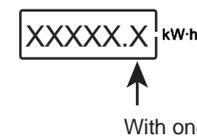


#### 6 LCD Display

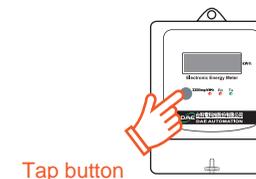
Power Up Display Sequence

| Sequence | Display  | Description  |
|----------|----------|--|
| 1.       | 888888   | Blinks twice   |
| 2.       | r --- XX | Firmware version (actual version will vary)              |
| 3.       | A1 - XXX | Meter address (default is serial number last two digits) |
| 4.       | b - 1 XX | Baud Rate (default is 2400 bauds)                        |
| 5.       | XXXXX.X  | Cumulative kWh   |

● Normal Operating Display: Cumulative kWh



● Display On Button Tap

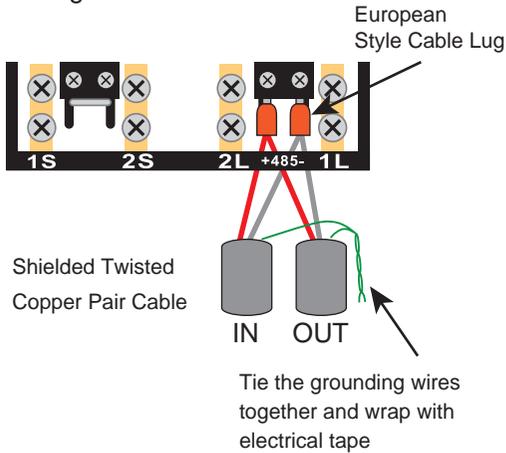


| Sequence | Display  | Description      |
|----------|----------|------------------|
| 1.       | r --- XX | Firmware version |
| 2.       | A1 - XXX | Meter address    |
| 3.       | b - 1 XX | Baud Rate        |
| 4.       | XXXXX.X  | Cumulative kWh   |

## 7 Communication Cable

1. Please use UL2464 shielded twisted copper pair cable size 24AWG-22AWG or better.
2. Use terminal lugs for each wire.
3. Make sure that the wires are screwed tightly to the right terminals.
4. Make sure that the polarities are correct. All (+) are connected together, and all (-) are connected together.

Wiring connection detail:



## 8 Configuration

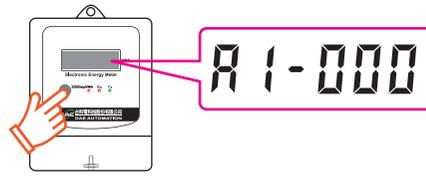
### ●RS485 Parameters

- 1.Meter Address: : 0~254
- 2.Meter Baud Rate: : 1200、2400、4800、9600

### ●Touch Button Setup

- Selectable Addresses : 0~254  
Subsequent diagrams show the setup steps

### 1. Enter the setup screen



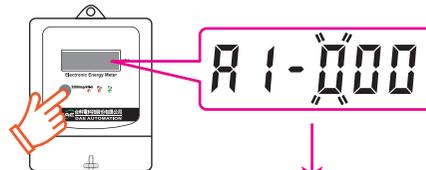
Tap for 3 seconds

Tap and hold the touch button for 3 seconds to enter the setup screen.

### 2. Enter the meter address

Procedure:

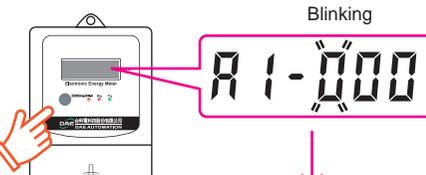
- ⊙ Tap and hold the touch button for 2 seconds to move to the next digit



Tap for 2 seconds



- ⊙ Tap to increment the blinking digit



Quick tap



- ⊙ Tap and hold the touch button for 3 seconds to finish setup

**\*Note: Baud rate cannot be changed through the touch button, but can only be changed through Modbus.**

### Example: Set the address to 123

Tap and hold the touch button for 3 seconds to enter the setup screen.



Quick tap to increment the blinking digit to "1"



Tap and hold the touch button for 2 seconds to move to the next digit



Tap twice to increment the blinking digit to "2"



Tap and hold the touch button for 2 seconds to move to the next digit



Tap thrice to increment the blinking digit to "3"



Tap and hold the touch button for 3 seconds to finish setup

## 9 Checklist

### ⊙ Before Powering On

- 1. Make sure that the DEM720 has been mounted securely.
- 2. Check that all wires are tightly connected to the right terminals.
- 3. Make sure that the load is wired correctly.

### ⊙ After Powering On

- 1. Check that the LCD is displaying properly.
- 2. Check that the load indicator blinks once in a while when a load is present.

**3200imp/kW·h**



The load indicator LED will blink 3200 times for each kilowatt-hour

