Energy Cost Meter

Installation and operating instructions

IMPORTANT! PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE CONNECTING THIS METER TO ELECTRICAL APPLIANCES

IMPORTANT

Don’t plug in an appliance where the load exceeds 10 Amps. Always ensure the plug of any appliance is fully inserted into the meter outlet. If cleaning of the metre is required, remove from mains power and wipe meter with a dry cloth.

KEYBOARD DEFINITION

1. **Master Clear**: Clear all data in memory including current time and all programs.
2. **UP**: Set current time, price, price programs, max. overload current combined with buttons SET; 12-24 hour mode during clock display state.
3. **SET**: Set current time, price, price programs, max. overload combined with buttons UP.
4. **FUNC**: Set current time, price, price programs, max. overload combined with buttons UP.

GENERAL FEATURES

1. Display current clock.
2. Display line voltage.
3. Display line current.
4. Display line power.
5. Display peak line power.
6. Display accumulative total electric quantity.
7. Display total on time and total electric charge.
8. Display total on time and total electric charge of price1.
9. Display total on time and total electric charge of price2.
10. Display the frequency.
11. Display power factor.
12. Adjustable max, overload current, max, overload warning.
13. Adjustable price / kWh
11. Combinations of day or blocks of days available as follows:
   - MO
   - TU
   - WE
   - TH
   - FR
   - SA
   - SU
   - MO, TU, WE, TH, FRI
   - MO, TU, WE, TH, FR, SA
   - SA, SU
   - MO, TU, WE, TH, FR, SA, SU

REPLACING BATTERY

Insert the 2pcs battery(LR44/AG13) according to the correct direction indication, replace battery cover.

NOTE

1. The cover and the screw must be in place before use.
2. The battery must be taken out if not use for an extended period of time.

THE DATA DISPLAY

Press FUNC. Button and the data displays as follows:

```
VOLTac  AMP  WATT  MAX WATT  kWh
ON TIME  PRICE1  PRICE2
```

1. The meter will display current clock and line voltage and frequency.
2. Press **FUNC** button once and release, the meter will display current clock and line current, power factor.
3. Press **FUNC** button once again and release, the meter will display current clock and real power, power factor.
4. Press **FUNC**. button once again and release, the meter will display max, line power and the time of max, line power, power factor. Press and hold **FUNC**. button for 5 seconds will clear max, line power display during this state.

5. Press **FUNC**. button once again and release, the meter will display current clock and accumulative power.

6. Press **FUNC**. button once again and release, the meter will display total on time and total electric charge.

7. Press **FUNC**. button once again and release, the meter will display total on time of price 1 and total electric charge of price 1.

8. Press **FUNC**. button once again and release, the meter will display total on time of price 2 and total electric charge of price 2.

9. Press **FUNC**. button once again and release, the meter will come back to display current time and line voltage. Press and hold **FUNC**. button for 5 seconds to clear accumulative total electric quantity and total electric charge during display state of total electric charge or total electric charge of price 1 or total electric charge of price 2.

10. **LCD** display----when total electric quantity, total electric charge overflow, the **OVER** will flash at the same time.

### SETTING PRICE OF COST/kWh & OVER LOAD CURRENT

Press and hold **FUNC**. button for 5 seconds during display state of voltage or current or power.

1. Setting **price 1**:
   a. Press **SET** button once and release, **SET** display, the first digital **COST/kWh** flash, press **UP** button to set it.
   b. Press **SET** button once again and release, the second digital **COST/kWh** flash, press **UP** button to set it.
   c. Press **SET** button once again and release, the third **COST/kWh** flash, press **UP** button to set it.
   d. Press **SET** button once again and release, the fourth **COST/kWh** flash, press **UP** button to set it.
   e. Press **SET** button once again and release, the radix point **COST/kWh** flash, press **UP** button to set it.
   f. Press **SET** button once again and release, the weekday flash, press **UP** bottom to set it.

2. Setting **price 2**:
   Press **FUNC**. button once and release after finish Setting price 1. Setting price 2, repeat above steps.

3. Setting **OVER LOAD** current data:
   Press **FUNC**. button once and release after finish Setting price 2.
   a. Press **FUNC** button once and release, **SET** and **AMP** display, the first digital **MAX. LOAD** flash, press **UP** button to set it.
   b. Press **SET** button once again and release, the second digital **MAX.LOAD** flash, press **UP** button to set it.
   c. Press **SET** button once again and release, the third **MAX.LOAD** flash, press **UP** button to set it.
   d. Press **SET** button once again and release, the fourth **MAX.LOAD** flash, press **UP** button to set it.

   The **OVER LOAD WARNING** will flash when load goes over set data. The function button is now inactive. You must take out the appliance and set the **OVER LOAD** data again.

### SETTING CURRENT CLOCK

1. Press **FUNC**. button until the **CLOCK** displays in **LCD**. (**Clock is located at the bottom right hand corner of the LCD**).

2. Press **SET** button once, The “**WEEK DAY**” will flash at same time, the clock change to **SET** mode. You can set the current clock now.

3. Press **UP** button to set the “**WEEK DAY**”.

4. Press **SET** button once again and release. The “**HOUR**” will flash. The “**WEEK DAY**” will stop flashing and keep display.

5. Press **UP** button to set the “**HOUR**”.

6. Press **SET** button once again and release, the “**MINUTE**” will flash. The “**HOUR**” will stop flashing and keep display.

7. Press **UP** button to set the “**MINUTE**”.

8. Press **SET** button once again and release, the time will come back to **CLOCK** display mode.
9. Press UP button during the CLOCK display state, to change 12-24 hour mode. To reset incorrect time, repeat above steps. After finishing set up, plug the meter into a regular power outlet. Plug in an appliance that you want to use and turn the mains power on. The meter will now measure the consumption of the appliance.

**STAND BY MODE**
Display of LCD will disappear without any operation once AC power is off for 1 minute. Press any key to bring up the display.

**SPECIFICATIONS**
- **Power supply**: 250V AC 50Hz
- **Max. load**: 10A, 2500W
- **Measure voltage range**: 210-301V AC
- **Measure voltage accuracy**: +/-3%
- **Measure current range**: 0.02-10A
- **Measure current accuracy**: +/-3% or +/-0.03
- **Measure power range**: 0-3010W
- **Measure power accuracy**: +/-4% or +/-10W
- **Accumulative electric quantity range**: 0-9999.9kWh
- **Measure frequency range**: 45-65Hz
- **Clock accuracy**: +/-1 minute per month
- **Power cost**: <2W
- **Operating temperature**: -10°C to +40°C
- **Battery**: 2 x 1.5V LR44/AG13
- **Battery Life**: About 3 months without AC power
ARLEC GUARANTEE
Arlec guarantees this product against defects of materials and workmanship for a period of 12 months from the date of purchase provided that the product is used in accordance with Arlec’s recommendations and within such voltage and current limits as are specified by Arlec in relation to the product. Arlec will at its own option make good, replace with the similar product, or provide credit for any product manufactured or supplied by it, which proves to be defective within the limits set out above provided always that no repairs, alterations or modifications to the product have been undertaken or attempted, other than by the company or its authorized agents. Should the purchaser wish to make a claim under the guarantee, the product should be returned prepaid to the place of purchase. To obtain warrantee the purchase receipt must be returned with the product. This guarantee is in addition to and does not take away from any rights available to the consumer under the Trade Practices Act and the State consumer Protection legislation.

PROOF OF PURCHASE
Please retain your receipt for all service or warranty claims.