

**Norgo Energy Meter
Model:NGE01**



KSPO:1053-10
norgo NGE01 MANUAL 1(ENG)
SIZE:W105xH148(mm)
BY Lai HZ 24/9/10

Introduction

Norgo Energy Meter is a product designed and developed in Denmark. It is our goal to help you to limit your electricity consumption and at the same time reduce greenhouse gas emission. By using Norgo energy meter you can save of up to 20%.

It is important to understand that Norgo Energy Meter is only a tool, the actual saving is up to you. By keeping the values in the display as low as possible you will save a lot of money on your electricity bill as well as reduce the CO2 emission.

Norgo Energy Meter is quite simple and easy to use. If you should have problems, though, please visit our homepage for more information. www.norgo.dk

Norgo Energy Meter with wireless sensor and transmission

Prior to use
Before using the meter for the first time, please read the instruction manual carefully and after that save it for later use.

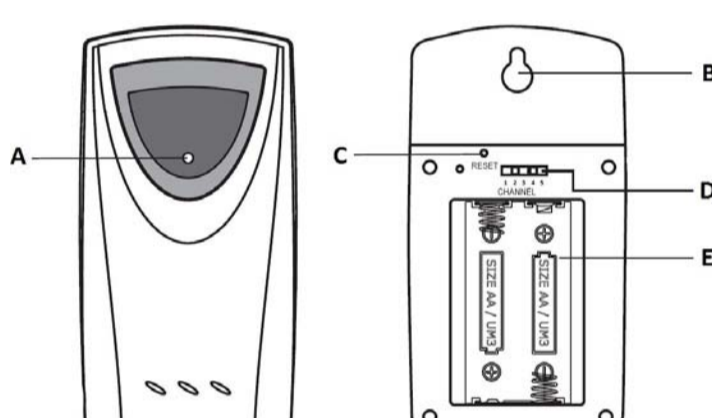
Description of the product
The Meter consists of a Display unit which is a wireless receiver, a wireless transmitter and a sensor

THE DISPLAY UNIT HAS THE FOLLOWING FUNCTIONS:



- A Easy-to-read display with extra protective glass showing your current consumption (real time) in kW, costs and CO2. Memory with history, graph, time and date.
- B Synchronizing button / Alarm (on/off)
- C Plus button (“+”)
- D Cost, CO2, kWh (Shift between your costs in kroner /øre, CO2 emission and your consumption in kilowatt/hour)
- E History/Clear Mem. Display of historical data for hour, day, week, and month as well as deletion of old data.
- F Set/Alarm button
- G Minus button (“-”)
- H Menu/ Channel button

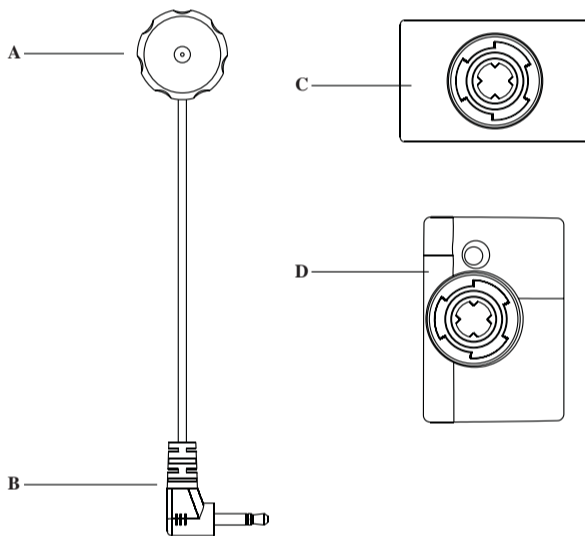
THE TRANSMITTER UNIT HAS THE FOLLOWING FUNCTIONS:



- A LED Indicator
- B Wall-Mount Recessed Hole
- C Reset button
- D Channel switch (choice of 1-5 channels)
- E Battery housing (2 AA batteries)

THE ENERGY SENSOR HAS THE FOLLOWING FUNCTIONS:

- A Sensor head
- B Mini jack plug.
- C Mounting plate flat
- D Mounting plate round



Mounting and replacing batteries

Important!
When putting the meter into use it is important to place the batteries in the transmitter before batteries are placed in the receiver.

2 AA 1.5V batteries are used in the transmitter. In order to place the batteries please first remove the battery cover on the back of the transmitter by loosening the screws with a screwdriver (is not included).

Before installing the batteries, select channel (1, 2, 3, 4 or 5) in the battery housing of the transmitter (E), so that the transmitter is able to recognize the signals of the various transmitters in case more than one transmitter is to be set up. The number of the channel is selected by setting the CHANNEL slide button (D)

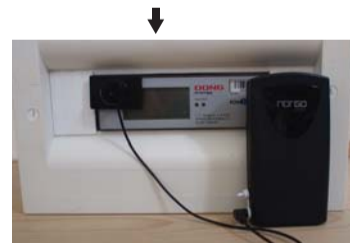
Place the 2 batteries in the battery housing when the channel has been selected. Make sure, that the +terminal and –terminal of the batteries are placed as indicated inside the battery housing. The transmitter will now begin to transmit a signal. Finally the battery cover is again screwed on carefully but firmly. When the batteries in the transmitter are low on power, an indicator in the display of the receiver will be shown (a small battery). If more than one transmitter has been set up, the number of the channel in question should be called to show the indicator for battery change. Replace the batteries as described earlier. When the batteries have been placed in the transmitter, place the batteries in the receiver

Remove the battery cover on the back of the receiver, after which 2 AA 1.5V batteries are placed in the battery housing. Make sure that the + terminal and – terminal are placed as indicated on the battery housing. Then put the battery cover on again.

When the batteries in the receiver are low on power, an indicator (a small battery) will be shown in the display. When the batteries have been placed in the receiver, all segments in the display will light up for a short moment.

SETTING UP THE SENSOR
It is important to identify what kind of electricity meter you have. *Norgo Energy Meter* fits all newer electronic meters with a so-called impulse LED. This is a small lamp indicating how much electricity you are using, with few blinks you use a little, with many blinks you use more. Normally these meters are set up to blink 1,000 – 10,000 times per kilowatt hour (kWh) See the example

Now the mounting plate (C) or (D) is mounted to your electricity meter. It is important that the plate is mounted so that the LED diode of your meter is exactly in the middle. Carefully turn the sensor eye into place. Turn the sensor eye clockwise until you feel the “KICK”, and the sensor is locked on the mounting plate. Connect the small jack (Mini jack) to the transmitter See the illustration.



Important!
If possible avoid direct light on the sensor when it is in function as this may cause errors in indication on the receiver.

SYNCHRONIZING BETWEEN TRANSMITTER AND RECEIVER

The transmitter is programmed with a unique ID so that it only works on your receiver. The transmitter and the receiver must be synchronized before the product is put into use.

When you use this product for the first time, the transmitter and the Display unit are both set when Channel 1. The Receiver and the Transmitter will synchronize automatically when the battery is inserted.

If the Display shows “-.-” after 15 minutes, make sure the channel for wireless transmission in both the Display Unit and the Transmitter are at the same channel. Press-and-hold the “SYNC” button, which you find on top of the main unit, for 3 seconds to start searching for the wireless signal.

- If you want to switch to another wireless channel:
- (1) Select your desired channel in the Transmitter.
 - (2) Press the RESET buttons to confirm your desired channel on the transmitter. If you also want to clear all memory of the previous measurement in the transmitter, Press and Hold the RESET button for the transmitter for 5 seconds.
 - (3) You will see the indicator light of the transmitter blinking concurrently with your electricity meter for approximately 15 minutes, after which it will only blink for approximately 40 seconds during each transmission.
 - (4) Press the “CHANNEL” button in the Display unit to select your desired channel.
 - (5) Press and hold the “SYNC” button for 3 seconds to let the Receiver search for the transmitter.
 - (6) You can press and hold “Clear Mem” to clear the old memory of your desired channel for all new measurements.

Important!
If the receiver is unable to receive a signal “-.-” displays at the top of the receiver Please repeat items 1-3.

SETTING THE MENU IN THE RECEIVER

In order to set the Menu, press the Menu/Channel button for 3 seconds.

Display Blinks	Setting
Displays 12/24 hours	Setting with the “+” and “-” buttons Accept by pressing the SET / ALARM button
Hour	Setting with the “+” and “-” buttons Accept by pressing the SET / ALARM button
Minutes	Setting with the “+” and “-” buttons Accept by pressing the SET / ALARM button
Month/Day or Day/Month display	Setting with the “+” and “-” buttons Accept by pressing the SET / ALARM button
Year in date	Setting with the “+” and “-” buttons Accept by pressing the SET / ALARM button
Day in date	Setting with the “+” and “-” buttons Accept by pressing the SET / ALARM button
Imp in date	Setting with the “+” and “-” buttons Accept by pressing the SET / ALARM button
Imp (Impulses) Here you key in how many Impulses your electricity meter transmits, is shown on your meter (e.g. 1,000p/kWh)	Setting with the “+” and “-” buttons Accept by pressing the SET / ALARM button
CO2 Set at 0.44 which is the average in Europe.	Setting with the “+” and “-” buttons Accept by pressing the SET / ALARM button
Electricity price per kWh You may take a look at your electricity bill to see what you pay per kWh inclusive of taxes. Or call your electricity supplier and ask them.	Setting with the “+” and “-” buttons Accept by pressing the SET / ALARM button

SETTING ALARMS

It is possible to set an alarm on your consumption, in that a way you have the possibility to pay attention to your consumption if it is too high.

Press the “SET/ALARM” button. Select by the “HISTORY/CLEAR MEM” button, which period you want the Alarm set at (e.g. TIME). Select with the “COST, CO2, kWh” button (where you want the alarm on price, CO2 or kWh. Select the value by pressing the “+” or the “-” button. Example: I want an alarm, if I use more than 5 kWh in one hour. Press the “SET/ALARM” button. Select “hour” with the “HISTORY/CLEAR MEM” button. Select “kWh” with the “COST,CO2,kWh” button. Press the “SET/ALARM” button and key in 0005.00 Enter with the “SET/ALARM” button. The alarm is now programmed and can be activated by pressing “ALARM ON/OFF” at the top of the display unit. A small bell will appear in the display indicating that the alarm is activated.

RATE SETTING

It is possible to set different prices at different times of the day. This is only relevant if you have different prices on your consumption during the day. Example:

From 06:00 – 18:00 your electricity price is 1.65
From 18:00 – 24:00 your electricity price is 1.75
From 24:00 – 06:00 your electricity price is 1.35

To set your rates press the “COST,CO2,kWh” button for 3 seconds. At the top of the display it will say T1 standing for rate 1. Here you key in your price and then the time from which this rate applies. T2 (Rate 2) where you key in your next price and time until you have been through all rates (it is possible to set 3 rates)

You are welcome to contact us if you have any questions or other enquiries. You can find all contact information on our homepage. www.norgo.dk

TROUBLESHOOTING

“THE DISPLAY SHOWS DASHES “-.-”

The Display shows “-.-” when the transmitter connected to the transmitter has been lost for 15 minutes. Check or replace the batteries on the transmitter. Press-and-hold the “SYNC” button 3 seconds, which you find on top of the main unit to start searching for the wireless signal.

Although wireless signals can pass through solid items and walls, the optimum situation is that there is free space to the main unit. The following may be the reason for reception problems:
- Too long distance between the wireless transmitter and the main unit.
- The signal is disturbed by materials such as metal surfaces, concrete walls or dense plants.
- Disturbances from wireless devices (such as wireless telephones, radio headset, baby alarms) and other electronic devices.

SAFETY

This product is made to provide you with many years of satisfactory service if you treat it carefully. Here are a few safety rules:

1. Do not immerse the unit in water.
2. Do not clean the unit with grinding or corrosive materials. This may result in scratches in the surface and attack the electronic circuits.
3. Do not expose the unit to exaggerated impact, shaking, dust, temperature, or air humidity, as this may result in malfunction, shorter electronic life, damaged batteries, and damaged parts.
4. Do not tamper with the internal components of the unit. This will make the warranty of the unit invalid and may result in unnecessary damage. There are no parts in the unit which will require service on the part of the user.
5. Only use new batteries as described in the instruction manual. Do not mix new and old batteries, as the old batteries may leak.
6. Always read the instruction manual carefully before using the unit.

WARNING

- The content of this instruction manual is subject to change without prior notice.
- Due to limitations in printing, the display shown in the instruction manual may differ from the real one.
- Reproduction of the content of this instruction manual is not allowed without permission by the manufacturer.

Technical specifications

NORGO Energy NGE101

Display Unit

Dimensions:.....H:185,7 x W:93,4 x D:33,2 mm
Power:.....2 x AA 1.5V Batteries
Battery life:.....> 1 year
Operational temperature:.....-5°C ~ 50°C

Transmitter

Dimensions:..... H:110 x W:59 x D:26 mm
RF Transmission frequency:.... 433 Mhz
RF Transmission Range: Maximum 30 meters (in open area)
Transmission cycle:.....App. 45 seconds
Power:.....2 x AA 1.5V batteries
Battery life:.....> 1 year
Operational temperature:.....-10°C ~ 60°C

Sensor

Dimensions:..... Diameter: 20 mm
Wire length 500mm

EC-DECLARATION OF CONFORMANCE

Product : NGE101

This product contains the approved transmitter and lives up to the essential requirements of Article 3 of the R&TTE 1999/5/EC Directive, if it is used for its intended use and that the following standards have been applied:

Effective use of radio frequency spectrum

(Article 3.2 of the R&TTE Directive)
applied standards EN 300 220-2 V2.1.2 (2007-06)

Electromagnetic compatibility

(Article 3.1.b of the R&TTE Directive)
applied standards EN 301 489-3 V1.4.1 (2002-08)

Low voltage directive

Applied standards EN 60950-1 : 2006

Further information:

Therefore this product is in accordance with the 73/23/EC directive, EMC Directive 89/336/EC and R&TTE Directive 1999/5/EC (appendix II) and carries the respective CE labelling.

R&TTE compatible countries:

All EU countries, Switzerland (CH)
and Norway (N)



If you are going to discard this product in the future, you should be aware that: Electrical products should not be discarded with the household garbage. If possible, recycle it. You may contact your municipality or the dealer for advice on recycling. (Directive about waste of electrical and electronic equipment)



Tested to comply with CE-standards