

Self Powered AC/DC Electric Motor Hour Meter, **Series MT10**



MT10



MT10R

Features

- Large 7 segment LCD display
- Low cost and small size
- No external power required
- No shunt required
- Solid state electronics
- Quartz crystal
- Wide operating temperature range
- High reliability
- Resettable, non reset version is available
- Easy to install
- Made in the U.S.A.

ENM is proud to present the new series MT10 self-powered Digital Hour Meter for electric motors. The MT10 keeps track of true motor running time for all types of AC or DC electric motors. The unit is powered by an internal lithium battery. No external power connections are required.

The operation of the Hour meter is triggered by a sensor attached at the end of 4 ft. external cable. When placed on the motor, the sensor senses the magnetic field through the motor casing.

Since the unit is triggered by the motors magnetic field, the hours display actual operation. This is useful for maintenance and warranty applications for any type of AC or DC powered electric motor. When the motor is on, the hours icon will blink on/off indicating hour meter is active.

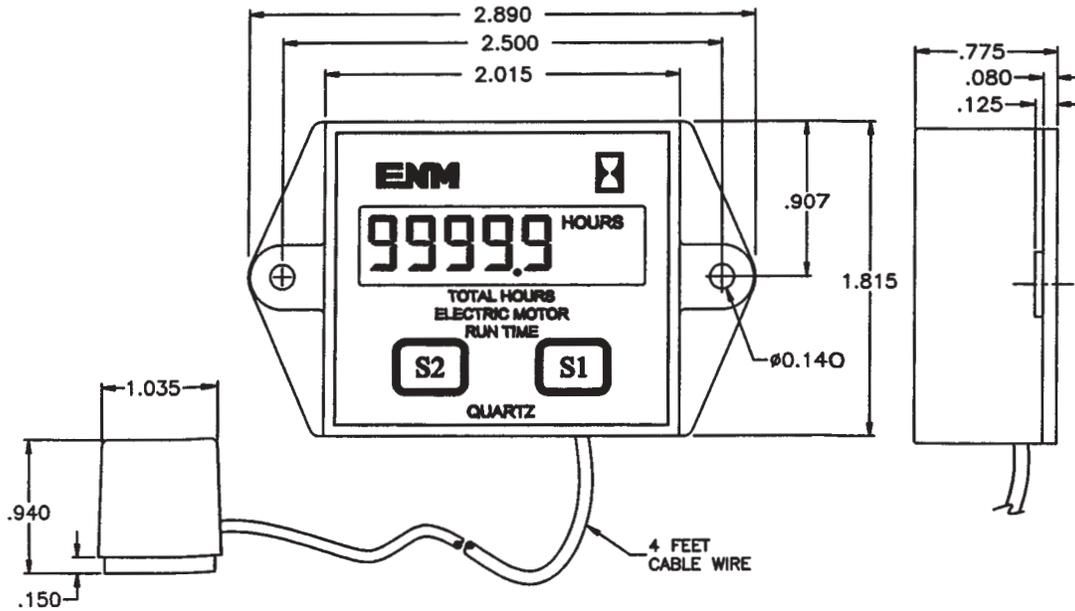
With solid state technology the MT10 series is built with a custom chip and with solid construction for maximum durability for harsh environments and rugged applications.

Specifications

Display Reading:	9999.9 Hours meter
Digit Height:	5-digits [8MM] LCD
Operating Voltage:	Internal lithium battery 15,000 hours continuous running
Temperature:	Standard -40C to +85C (-40F to +185F)
Vibration Resistance:	Withstands 10 to 75Hz @ 1 to 8 g's
Mounting Configuration:	Two hole base mount

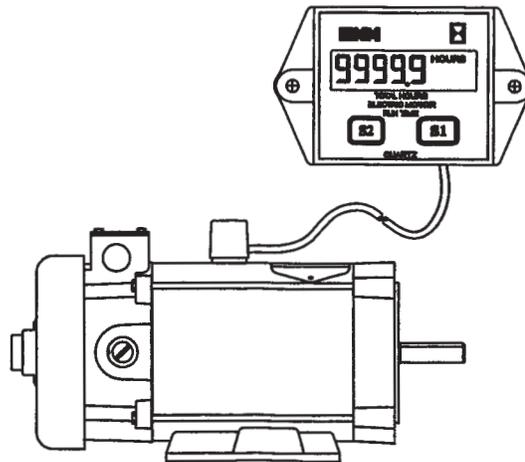
2004 ENM Co.®

MT10



AC or DC Motor Application

ENM	DESCRIPTION
MT101	Non-reset with ENM logo
MT101R	Reset with ENM logo



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LIMITED WARRANTY HOUR METERS

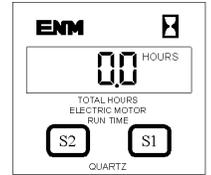
ENM Company hour meters are warranted to the consumer to be free from defects in material and workmanship for a period of 1 year. All ENM products which fall within the warranty period due to defects in material or workmanship will be repaired or replaced, at ENM's option, without charge to the consumer when returned with proof of purchase to any authorized ENM dealer in the United States, transportation charges prepaid, provided there is no evidence of improper installation, tampering, or other abuse. All implied warranties, including any implied warranty of merchantability or fitness for a particular purpose, shall be limited in duration to the express warranty period specified above. ENM disclaims any liability for consequential damages due to breach of any written or implied warranty on its hour meter. Datasheet information subject to change.

INSTRUCTIONS

**ENM Company's
New AC/DC Electric Motor Monitor
MT10 Series Resettable**

1 Introduction

The new AC/DC Electric Motor Monitor is a self-powered LCD Hour Meter and Maintenance meter all in one. An internal lithium battery provides the power for the monitor and the operation of the Hour Meter is triggered by a sensor attached at the end of a 4 ft. external cable. When placed on the motor, the sensor detects the magnetic field through the motor casing. The maintenance meter is used to alert maintenance personnel that a time interval has expired and the schedule maintenance should be performed on the motor. Before changing any settings to the ENM meter, ensure that the motor is off.



2 Installation

To locate the magnetic field, place the sensor near the running motor. As soon as the magnetic field is located the **HOURS** icon on the display will start to blink. The blinking **HOURS** icon indicates that the unit is counting time. Uncoil the Wire and place the sensor on motor (where the magnetic field was located). We have included double-sided tape to be used for mounting the sensor. Attach the display unit to a location where it can be easily read. The LCD will display the accumulated hours on the Hour Meter and the **HOURS** icon.

3 TO SET THE MAINTENANCE INTERVAL TIMER

Press and hold down the **S2** button for 4 seconds. The right most digit on the LCD will flash and the **SERVICE** icon will be displayed. Next press and hold the **S1** button to increment the flashing digit. When the desired number of hours has been reached, release the **S1** button. Next press the **S2** button for 1 second to increment to the next digit. Repeat above steps until the service time interval has been entered. After 14 to 16 seconds with no buttons pressed, the LCD display will return to total hours mode.



4 ACTIVATING THE MAINTENANCE INTERVAL TIMER

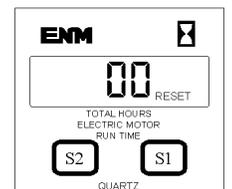
Press and hold the **S1** and **S2** button simultaneously for 10 seconds. The two digits will increment to 10 seconds and then return to total hours mode. When the motor is running and the maintenance time has reached zero, the service icon will come on.

5 VIEWING MAINTENANCE INTERVAL

Press and hold the **S2** button for 4 seconds to view remaining time of your maintenance interval. To continue current maintenance do nothing. If you would like to start a new maintenance interval, repeat steps 4 & 5 again. Each time you want to view the remaining time of your maintenance, press and hold **S2**.

6 RESETTING THE SERVICE ICON

Once the Maintenance Interval time is complete, the **SERVICE** icon will come on. You will need to perform the following operation to reset the Maintenance for another interval. Press and hold the **S1** and **S2** buttons for 10 seconds. The **SERVICE** icon will disappear. The maintenance time will automatically default to the number previously programmed.



7 TO RESET TOTAL HOURS AND MAINTENANCE TIME

Press and hold the **S1** button until **05** is displayed. Release the **S1** button and after 8 seconds the display will return to total hours. Press and hold **S1** and **S2** simultaneously for 10 seconds and the meter will perform a total reset of both the total hours and maintenance time. The total reset option can be removed during manufacture.

8 TO REPROGRAM UNIT AFTER TOTAL RESET

Press and hold the **S1** button for approximately 4 seconds and the unit will go into programming mode. Set the unit to desire program using the table below:

Program	Number
Set unit for hour meter mode	04
Resetting the unit	05

Release the button once the desire number appears on display. The display will flash for a few seconds before returning to normal display.