



INSTRUCTION MANUAL

MT740

Flexible TRMS Clamp Adaptor



1. Safety Information

International Safety Symbols



This symbol, adjacent to another symbol or terminal, indicates the user must refer to the manual for further information.



This symbol, adjacent to a terminal, indicates that, under normal use, hazardous voltages may be present



Double insulation

Safety Notes

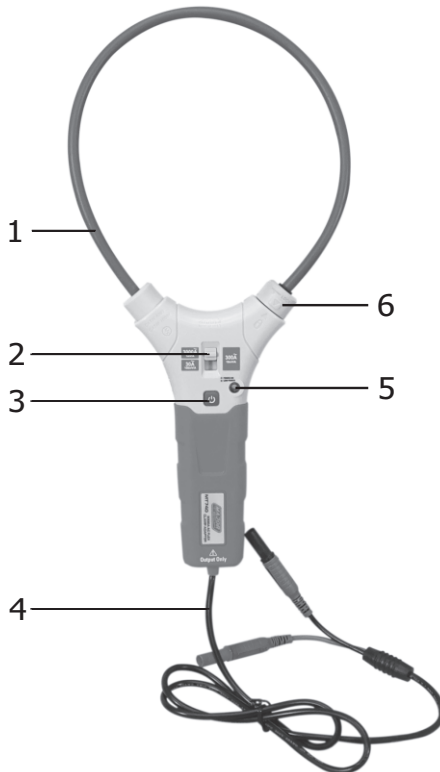
- Do not exceed the maximum allowable input range of any function
- Do not use when instrument power is off.
- Remove the battery if meter is to be stored for longer than 60 days.

Caution

- Improper use of this meter can cause damage, shock, injury or death. Read and understand this user manual before operating the meter.
- Inspect the condition of the test coil and the meter itself for any damage before operating the meter. Repair or replace any damage before use.
- Use great care when making measurements if the voltages are greater than 25VAC RMS or 35VDC. These voltages are considered a shock hazard.
- If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
- Do not operate meter while Low Battery warning is on. Replace batteries immediately.

2. Description

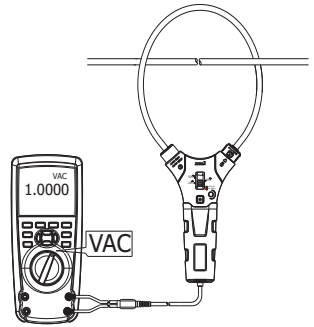
1. Flexible current coil
2. Range switch
3. Power switch
4. Analog voltage output cable
5. Power indication
6. Turn knob



3. Operation

AC Current Measurements

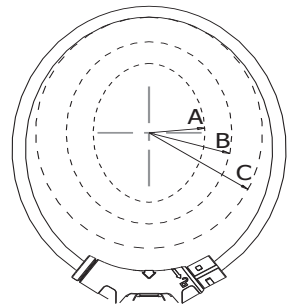
According to the power switch, turn on the instrument power supply, insert the output line of the meter into the input end of the high precision digital universal meter with AC voltage measurement function. Pre estimate the size of the current, to obtain the best output signal, to choose a good measurement of gear. Single phase and then measured the ring into the flexible coil, placed in the central position, and completely closed. This can be converted to obtain the magnitude of the current value.



4. Position Error of Clamp

Accuracy and position error assumes centralized primary conductor at optimum position ,no external electrical or magnetic field, and within operating temperature range.

Distance from Optimum(mm)	Flexible coil radius (mm)		Error
	A	35	
	B	50	1.0%
	C	60	1.5%
			2.0%



5. Maintenance

Cleaning and Storage

Periodically wipe the case with a damp cloth and mild detergent; do not use abrasives or solvents. If the meter is not to be used for 60 days or more, remove the battery and store it separately.

Battery Replacement

1. When the battery capacity is more than 2.5V, the power indicator light is green. When the battery capacity is about less than 2.5V, the power indicator is red. Need to replace the battery in time.
2. Remove the Phillips head screw that secures the rear battery door
3. Open the battery compartment.
4. Replace two AAA batteries.
5. Secure the battery compartment.

6. Technical Specifications

Function	Range	Best Measurement Range	Output Voltage	Accuracy
AC Current 50~400Hz True RMS	30A AC	≤30.00A	100mV/A	± (3.0% + 5mV)
	300A AC	30.0A-300.0A	10mV/A	± (3.0% + 3mV)
	3000A AC	300A-3000A	1mV/A	± (3.0% + 3mV)

Note:

- Accuracy is given as ±(% of reading + counts of least significant digit) at 23°C±5°C, with relative humidity less than 80%RH.
- Output Noise: <5.5mV for each range.
- Max. output voltage: 5.8V.
- All scale, if the output voltage is greater than 3V, the results indicate that the measurement has been out of range, not to be used as indicator assessment.

7. General Specifications

Function	Range
Power indication	Green LED light
Low Battery indication	Red LED light
Operating Temperature	5°C to 40°C (41°F to 104°F)
Storage Temperature	-20°C to 60°C (-4°C to 140°C)
Operating Humidity	Max 80% up to 31°C (87°F) decreasing linearly to 50% at 40°C (104°F)
Storage Humidity	<80%
Operating Altitude	2000m (7000ft.) maximum.
Batteries	2 x AAA
Safety Standard	EN61010-1, EN61010-2-032, EN61326-1.
Power supply	Batteries or 6V Exterior DC.
Over Voltage	CAT III 1000V and CAT IV 600V, Pollution Degree 2.
Weight	210g
Dimensions	180mm x 106mm x 28mm



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