# CLAMP-ON DCA/ACA MULTIMETER ADAPTOR

# OPERATING INSTRUCTION

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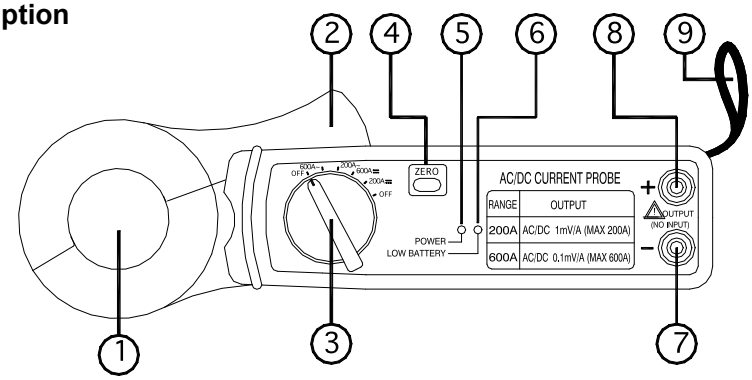
## I. Features:

- Plugs into any brand DMM with 400mV or 2V input range for non-contact current monitoring and wave form pick- up
- 1.2” (30mm) clamp jaw opening
- Measures DC Current when DMM in DC rang and AC current in to AC range
- One touch “Auto Zero” for DCA measurements

## II. Panel Description




1. Transformer Jaw
   This is used to pick up current signal. To measure DC/AC current, The jaw must be enclosed.
2. Transformer Trigger
   This is used to open the jaw.
3. Function Selector Switch
   This is used to select the function user desired, such as DCA, ACA measurement or turn the meter OFF.
4. Zero Button
   Once this button is pressed, the current reading shall be set to zero. The function is also used to remove offset value caused by the residual magnetism remained in the core for the dc current measurement.
5. Power ON/OFF LED display
6. Low Battery LED indication
   When the LED lamp turns on, the battery should be changed. Refer to Section V for battery replacement
7. Output Terminal –
   This terminal is used as output for DCA - polarity and ACA. (No input)
8. Output Terminal +
   This terminal is used as output for DCA + polarity and ACA. (No input)
9. Hand Strap
   Put your hand through the hold of hand strap to avoid.

## III. Specifications:

**Operating environment:** 0 $^{O}$C to 50 $^{O}$C (32 $^{0}$F to 122 $^{0}$F) at < 70 % relative humidity.
**Storage temperature:** -20 $^{O}$C to 60 $^{O}$C (-4 $^{0}$F to 140 $^{0}$F) at < 80 % relative humidity.
**Power:** One 9V, NEDA1604, IEC6F22 Battery.
**Dimensions:** 209 x 43 x 30mm.
**Weight: Approx.:** 270g.

**Accuracy is given at (22 $^{O}$C~ 28 $^{O}$C) / (71 $^{0}$F~ 82 $^{0}$F), less than 70%RH**

| Function | Range | Output | Sensitivity | Accuracy %rdg | Overload Protection (No input) |
|---|---|---|---|---|---|
| DC Current | 200A | 1mV/A | 1A/mV DC | ±(3.0% + 0.6Amps) | MAX. 200A Output |
| | 600A | 0.1mV/A | 10A/mV DC | ±(3.5% +3Amps) | MAX. 600A Output |
| AC Current (Frequency : 50Hz~400Hz) | 200A | 1mV/A | 1A/mV AC | ±(3.5% + 0.4Amps) | MAX.200A Output |
| | 600A | 0.1mV/A | 10A/mV AC | ±(4.0% + 4Amps) | MAX. 600A Output |

### IV. Operation Instructions

**DC Current Measurements:**

a. Set the rotary switch at 200A DC or 600A DC.
b. Push the Zero Button to set the reading zero. If cannot, release the button a while and push it again.
c. Press the trigger to open the jaw and fully enclose the conductor to be measured. No air gap is allowed between the two half jaws.
d. Connect the test leads to the output shock of the clamp probe and input shock of the DMM.
e. Turns on the DMM and set it at DCV 400mV or 2V range.
f. Read the measured value from the DMM LCD display.
g. Make sure that the offset value caused by the residual magnetism is still removed. If the new offset value is produced, remove it with the zero button and make a new measurement again according to the “c” and “d” (If the current to be measured is larger than the current to be measured before, or the direction of current changes, the new offset value will be produced)

**AC Current Measurements:**

a. Set the rotary switch at200A AC or 600A AC.
b. Press the trigger to open the jaw and fully enclose the conductor to be measured. No air gap is allowed between the two half jaws.
c. Connect the test leads to the output shock of the clamp probe and input shock of the DMM.
d. Turns on the DMM and set it at ACV 400mV or 2V range.
e. Read the measured value from the DMM LCD display.

## V. Battery Replacement

When the low battery LED lamp is turned on, replace the old battery with new one.

a. Turn the power off and remove the test leads from the clamp mater.
b. Remove the screw of the battery compartment.
c. Slide off the old battery.
d. Remove the old battery
e. Insert one 9V NEDA1604, IEC6F22 battery.
f. Replace the battery compartment and secure the screw.