

DCA/ACA CLAMP ADAPTER

Model : CA-502

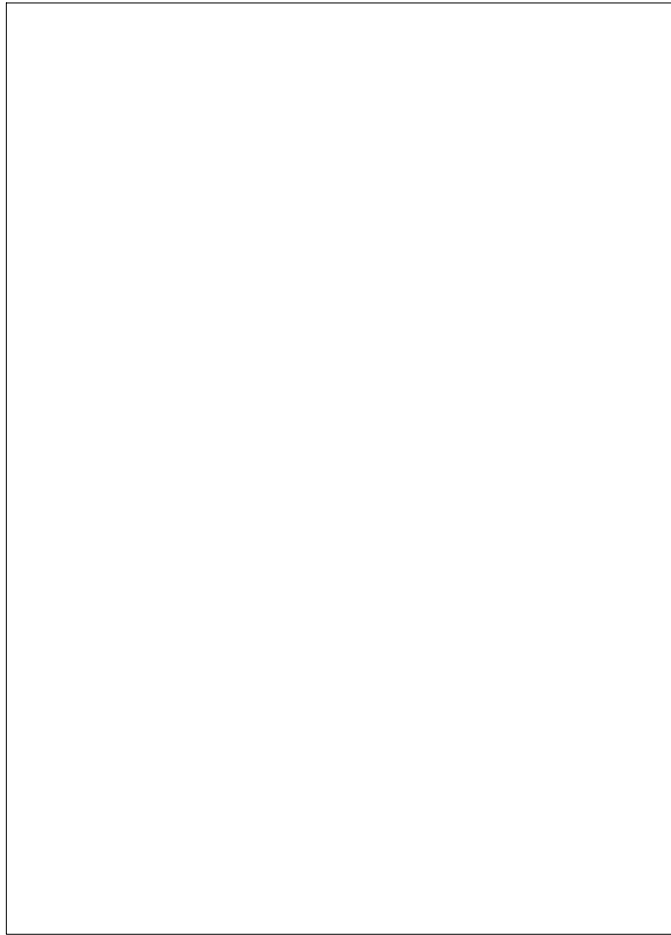
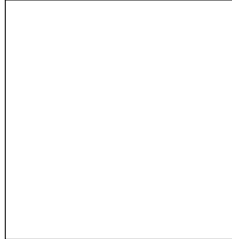


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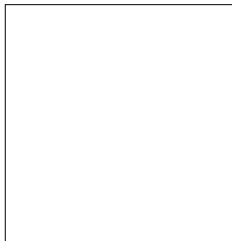
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Caution Symbol



Caution :

- * Risk of electric shock !
- * When make the measurement, do not clamp any conductor that not insulated.



Caution :

- * Do not apply the overload current to the Current Sensing Jaw.
- * Stop the measurement before open the battery cover !
- * Cleaning - Only use the dry cloth to clean the plastic case !

Environment Conditions

- * Installation categories III .
- * Pollution Degree 2.
- * Altitude up to 2000 meters.
- * Indoor use.
- * Relative humidity 80% max.

1. FEATURES

- * To match "DIGITAL MULTIMETER" be used as a DIGITAL DCA & ACA CLAMP METER.
- * Wide measuring range max. measuring up to 1000 ACA, 1000 DCA.
- * Design to meet IEC1010 safety requirement.
- * Build in low battery check function.

2. SPECIFICATIONS

2-1 General Specifications

Range	ACA	0 - 1000 ACA 2 ranges (200 ACA, 1000 ACA)
	DCA	0 - 1000 DCA 2 ranges (200 DCA, 1000 DCA)
Output	ACA	1 AC mV per 1 ACA.
	DCA	1 DC mV per 1 DCA.
ACA Frequency Response	ACA frequency response is from 40 to 400 Hz, specification be tested on sine wave 50/60 Hz.	
Sensor	Hall effect sensor.	
Safety Standard	Meet IEC 1010.	
Battery	006P, MN1604 (PP3) DC 9V battery or equivalent, alkaline or heavy duty battery.	
Power Consumption	Approx. 15 mA	
Max. Conductor Size	38 mm (1.5 inch) Dia.	

Operating Temperature	0°C to 50°C (32°F to 122°F)
Operating Humidity	Less than 90% RH
Dimension	185 x 78 x 33 mm (7.2 x 3.1 x 1.3 inch)
Weight	340 g/75 Lb.
Accessory Include	Operation Manual..... 1 PC.

2-2 Electrical Specifications (23 5 C)

Function	Range	Accuracy	Overload Protection
DC current	200 A	#(1.5% + 1 A)	AC/DC 1000 A
	1000 A	#(2% + 5 A)	
AC current	200 A	#(1.5% + 1 A)	AC/DC 1000 A
	1000 A	#(2% + 5 A)	

Remark :

Spec. tested under the environment RF Field Strength less than 3 V/M & frequency less than the 30 MHz only.

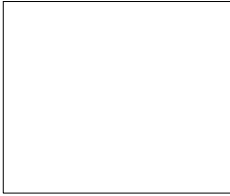
3. FRONT PANEL DESCRIPTION

Fig. 1

- 3-1 Current Sense Jaw
- 3-2 Trigger
- 3-3 DCA Zero Adjust Knob
- 3-4 Off/On/BAT. CHECK Switch
- 3-5 200 A/1000 A Range Switch
- 3-6 Output Plugs
- 3-7 Battery Compartment/Cover
- 3-8 Power Indicator

4. MEASURING PROCEDURE

Caution :



- * **Risk of electric shock !**
- * **When make the measurement, do not clamp any conductor that not insulated.**



Caution :

- * **Do not apply the overload current to the Current Sensing Jaw.**

Power on the meter by slide the " Off/On/BAT. CHECK Switch " (3-4, Fig. 1) to the " On " position, the Power Indicator will light (3-8, Fig. 1).

4-1 AC current Measurement

- 1) Determine the highest anticipated ampere (1000 A or 200 A) on the " Range Switch " (3-5, Fig. 1).
- 2) Insert the " Output plugs (red or black) " (3-6, Fig. 1) to the input terminal of Digital Multimeter. Set the Multimeter to " AC 200 mV " or " AC 2V " range.
- 3) Press the " Trigger " (3-2, Fig. 1) to open the transformer jaws and clamp one conductor only, then read the display values from the Multimeter directly (Display : 1 AC mV per 1 ACA).

4-2 DC Current Measurement

- 1) Determine the highest anticipated ampere (1000 A or 200 A) on the " Range Switch " (3-5, Fig. 1).
- 2) Insert the " Output plugs (red or black) " (3-6, Fig. 1) to the input terminal of Digital Multimeter. Set the Multimeter to " DC 200 mV " or " DC 2V " range.

- 3) Adjust the " DCA Zero Adj. knob " (3-3, Fig. 1) until the display show " 0 "
- 4) Press the " Trigger " to open the transformer jaws and clamp one conductor only, then read the display values from the Multimeter (Display : 1 DC mV per 1 DCA).

Consideration:

As the jaw core may remain some magnetic force after using for a while. If the display can not reach " 0 " when adjusting " DCA ZERO KNOB ", please take following process to correct it:

***A. To change the direction of the measured DC current.
or B. Open the JAWS several times.***

5. MAINTENANCE



Caution :

*** Stop the measurement before open the battery cover !**

5-1 Battery Replacement

- 1) Place the " Off/On/BAT. CHECK Switch " (3-4, Fig. 1) to the " BAT CHECK " position. If the DMM show the value < 100 mV, it indicates the battery output less than 6.5 V - 7.5 V & should change the battery.
- 2) Open the " Battery Cover " (3-7, Fig. 2) away from the instrument and remove the battery.
- 3) Install a 9 V battery (heavy duty) and replace the cover.

5-2 Cleaning



Caution :

*** Cleaning - Only use
the dry cloth to clean
the plastic case !**

**6. THE ADDRESS OF AFTER SERVICE
CENTER**

