read this manual thoroughly. After reading it, keep it together with the product so you can refer to it when necessary. Using this product in ways not specified in this manual may damage its protection function

Instructions given under the "MARNING" and "Macaution" headings must be followed to prevent accidental burns or

The meanings of the symbols used in this manual and on the product are as follows.

1-1 Explanation of Warning Symbols

 ⚠ Very important instruction for safe use The warning messages are intended to prevent accidents

to operating personnel such as burn and electrical shock. The caution messages are intended to prevent damage to

= : Direct current (DC) ± : Ground ~ : Alternating current (AC) + : Capacitance Ω : Resistance Hz : Frequency

• DUTY: Duty cycle → : Diode : Double insulation (Protection Class II) — ⇒ + : Plus input (Red)

----- : Minus input (Black) 1-2 Warning Instruction for Safe Use

To ensure the meter is used safely, be sure to observe the structions when using the instrument.

- . Never use meter on $\bar{\text{th}}\text{e}$ electric circuits that Exceed 3.6 kVA. Pay special attention when measuring voltages of AC 33 Vrms (46.7 V peak) or DC 70 V or more to avoid injury. The clamp sensor provided with this instrument is
- exclusively for low-voltage use. Perform clamp current measurement with 600 V or less lines. Never apply an input signal exceeding the maximum
- rating input value. Never use meter for measuring the line connected with equipment (i.e. motors) that generates induced or surge voltage since it may exceed the maximum allowable voltage.
- Never use uncased meter. 8. Always keep your fingers behind the finger guards on the probe

Never use meter if the meter or test leads are damaged or broken.

- 1 -

[4] DESCRIPTION OF FUNCTIONS

When canceling an operation, do not turn the function switch during measurement.

— \land Warning

Turn this switch to turn the power ON and OFF and to select

the measurement function 4-2 SELECT Button (V · Ω/ •»)/ → · CLAMP A positions):

4-1 Power Switch & Function Switch (All Functions):

As this button is pressed, the function switches in the order of $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right)$ the arrows (→) as shown below.

• V position: AC voltage (\sim) \rightarrow DC voltage (\Longrightarrow) \rightarrow AC voltage • Ω/N / \rightarrow position: Resistance measurement (Ω) \rightarrow Continuity

check (\bullet)) \rightarrow Diode test (\clubsuit) \rightarrow Resistance measurement (Ω) • CLAMP A position: AC current $(\sim) \rightarrow$ DC current $(=) \rightarrow$ AC current (√)

4-3 RANGE Button (DCV · ACV · Ω · +· Functions) Press this button to engage the manual mode and fix the range (extinguished AUTO).

When the manual mode is engaged, each press of this button changes the range. Select an appropriate range while confirming the unit and the position of the decimal point on the display. To restore the auto range, keep this button depressed for more than 1 second (lit AUTO).

This button cannot be used when in Hz/DUTY measurement.

(DCV · ACV · Ω · •») · ★ · + · DCA · ACA Functions): Press this button to enter the MAX/MIN mode. As this button is pressed, the measurement range switches in the order of the arrows (→) as shown below.

- MAX value indication (lit MAX) → MIN value indication (lit MIN) → Current measurement value indication (blinking MAX MIN) → MAX value indication (lit MAX)
- MAX value indication: Displays the maximum value of the values measured since the engagement of the MAX/MIN mode.
- MIN value indication:

5-2 Voltage Measurement

Displays the minimum value of the values measured since the engagement of the MAX/MIN mode - 5 -

. Never apply an input signal exceeding the maximum

- rating input value. . Be sure to disconnect the test pins from the circuit when changing the function.
- . Always keep your fingers behind the finger guards on the probe when making measurements.

Function Max. rating input value Measurement range DC600.0V 660.0mV, 6.600V, 66.00V, 600.0V ACV AC600.0V 660.0mV, 6.600V, 66.00V, 600.0V

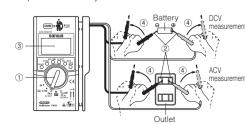
1) Applications

DCV:Voltage of the battery and DC circuit are ACV: Sine wave AC voltage, such as lighting voltage, is

2) Measurement procedure ① Set the function switch to the "V" position and select

either DCV or ACV with the SELECT button. 2 Apply the red and black test pins to the circuit to

- For measurement of DCV, apply the black test pin to
- the negative potential side of the circuit to measure and the red test pin to the positive potential side.
- · For measurement of ACV, apply the red and black test pins to the circuit to measure.
- 3 The reading of voltage is shown on the display 4 After measurement, release the red and black test pins from the object measured



Readings are unstable when test leads are opened. ◆ Accuracy is guaranteed in the case of sine wave.

- 9 -

and the clamp sensor barrier when making measurements. Be sure to disconnect the test pins from the circuit when

changing the function.

. Before starting measurement, make sure that the function and range are properly set in accordance with the . Never use meter with wet hands or in a damp environment 2. Never open the instrument case except when replacing

batteries. Do not attempt any alteration of original specifications 3. To ensure safety and maintain accuracy, calibrate and check the instrument at least once a year. The instrument is for indoor use only.

equipment such as a transformer or large current path

electromagnetic waves generated by wireless equipment

This instrument may malfunction or may not be able to

take correct measurements with special waveforms such

DC/AC 600 V

⚠ Voltage and current

input prohibited

DC/AC 100 A

∆Voltage input

prohibited

Note: AC voltage is regulated by rms, values of sinusoidal wave

Holds in memory the maximum and minimum values while

displaying the current measurement value. Press this button

to confirm the maximum and minimum values by switching

To disengage the MAX/MIN mode, keep this button

●When the function or range is switched, the MAX/MIN mode

Press this button to switch the mode to Hz/DUTY measurement. Each time this button is pressed when the ACV

or ACA function is selected, the mode switches in the order of

ACV or ACA measurement → Hz measurement → DUTY

Press this button to enter the REL measurement mode when

the DCV, ACV, Ω , \bullet), \rightarrow , +, or ACA function is activated

value will be set to zero using the input value at the time of

pressing the button as the reference value. To cancel the REL

Pressing this button in the DCA mode sets the displayed

The value at the time the button is pressed will be canceled,

To deactivate the ZERO set function, press the button again

Ex.) Display after the REL/ZERO button is pressed during

•When the function or range is switched, the REL

◆ The frequencies where accuracy is guaranteed in the

◆ Although the terminals to be measured are short-

ange and 40 ~ 400 Hz in other ranges.

ACV measurement are 40 ~ 100 Hz in the 660 mV

circuited in the AC 660 mV and AC 6.6 V ranges, up

10 counts may remain in the AC 660 mV range

and up to 7 counts may remain in the AC 6.6 V

◆ Measurement of an inverter power supply circuit may

– \Lambda Warning –

. Never apply an input signal exceeding the maximum

. Do not hold the test probe by a section closer to the test

. Do not turn the function switch during measurement.

Function | Max. rating input value | Measurement range

1) Applications: Measuring the frequency and duty of any

① Set the function switch at the V position and press

2 Press Hz/DUTY button to select the frequency (Hz)

3 Apply the red and black test pins to a conductor to

⑤ After measurement, release the red and black test

measurement or DUTY ratio measurement.

(600Vrms or less) 20.0% ~ 80.0% at 50/60Hz

660.0Hz,6.600kHz,66.00kHz

rement range will be fixed, and the displayed

Display in REL measurement

△DC 3.000V

△ DC 0.000V

△DC-2.000V

(DCV · ACV · Ω · •)) · \rightarrow · + · DCA · ACA Functions):

Maximum rating | Maximum overload

protection input

600 V DC/AC

100 A DC/AC

or areas where electrostatic charges are generated.

as those produced by an inverter circuit.

terminals input value

1-3 Overload Protections

DCA · ACA | sensor

DCV · ACV

Hz / DUTY

 $\Omega/ \cdot n) / \rightarrow$

⊣⊢

2-1 Applications

will be canceled.

Input

(Red)

(Black)

Clamp

section

[2] APPLICATION AND FEATURES

Current measurement value indication:

depressed for more than 1 second.

the arrows (\rightarrow) as shown below.

4-6 REL/ZERO Button

value to ZERO (lit ZERO).

DC3.000V input

and the display will show 0.0A.

Actual input value

DC 6.000V

DC 3.000\

DC 1.000V

(lit **R ⚠**).

4-5 Hz/DUTY Button (ACV · ACA Functions):

measurement → ACV or ACA measurement.

measurement, press this button again.

and keep it depressed for more than 1 second.

measurement or ZERO set will be canceled.

cause a malfunction.

rating input value.

2) Measurement procedure

5-3 Frequency/DUTY Measurements (Hz/%)

pin side behind the finger quard.

66.00kHz

the SELECT button to select ACV.

4 Read the value on the display.

pins from the object measured.

between the MAX and MIN value indications.

__

- Provided with a current clamp sensor that can measure up to 100 The clamp sensor has a thin U-shaped sensor design that is 7 mm. thick. Also because the inclination angle of the sensor is variable . Correct measurement may not be possible in areas exposed to strong magnetic fields generated by electrica
 - between 0° and 180°, the display section of the main unit can be adjusted to an easy-to-view angle. Provided with RANGE hold, MAX/MIN hold, REL/ZERO and DATA

additional functions, as well as enabling measurement of small type

communication equipment, electrical home appliances, lighting

A current clamp sensor is also provided that can measure up to 100

A DC/AC, allowing measurement of the electric consumption of equipment that uses an automotive battery or AC power supply. This

can be done by simply clamping a single line of electrical wiring in

• The instrument is compact and lightweight and has been

designed in accordance with the safety standard IEC 61010-1.

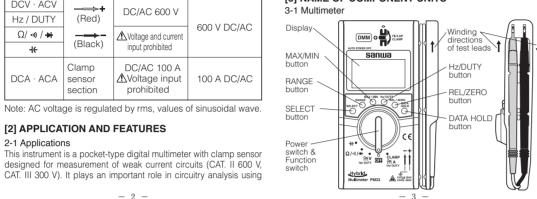
voltage and batteries of various types.

the device being measured.

- HOLD functions that are convenient for measurement.
- When the Hz/DUTY measurement function is used during the activation of the ACV/ACA function, the frequency and duty ratio of the signals that are being measured can also be measured.

 • Provided with an Auto Power Off function (approx. 30 min.), which
- can also be canceled. • The storable sections of the test leads and test probes use an
- elastomeric material that is easy to wind and store.

[3] NAME OF COMPONENT UNITS



4-7 DATA HOLD Button (All Functions)

When this button is pressed, the will be lit in the display and the value displayed at that time will be maintained. The display will stay the same even if the measurement input changes. Pressing this button again will cancel the DATA

HOLD mode and restore the measurement mode. ●When the function or range is switched, the DATA HOLD

4-8 Auto Power Off (APO):

The power and display will be turned off automatically when no switch or button operation is made for about 30 minutes after the power was turned on. When a button is pressed or the function switch is turned

during measurement, the time until the Auto Power Off will be extended an additional 30 minutes. To wake up from the Auto Power Off mode, press the button again. When returned, the value at the time of the Auto Power Off will be displayed using the DATA HOLD mode. To disable this function, turn the inction switch while pressing any button (except the SELECT or DATA HOLD button) to turn on the power (lit APO). When the Auto Power Off mode is engaged, the APO is lit in the display. •Although power consumption in the Auto Power Off mode

the is less than 1/100 of that of the turned-on status, be sure to set the power switch to OFF as soon as measurement is

4-9 Low Battery Indication

When the built-in batteries are exhausted and the battery voltage drops below about 2.3 V, the will appear in the display. If this icon is lit, replace the batteries with new ones (two at the same time).

[5] MEASUREMENT PROCEDURE

3-2 Display

Data hold operation -

Auto range mode-

- \Lambda Warning -. Make sure that no low battery indication appear in the

2. Never use meter if the meter or test leads are damaged

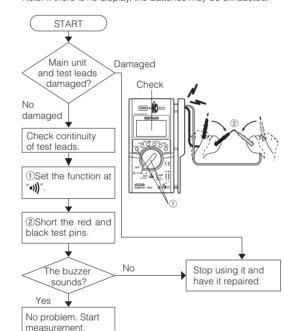
AUTO DH - + +)) REL MAX MIN ZERO

Decimal points

Numerical indication

3. Check continuity of test leads.

Note: If there is no display, the batteries may be exhausted.



- 7 -◆ When the input terminal is not connected, the display may fluctuate and be unstable. This is not a nalfunction

◆ The frequency measurement range is 20 Hz ~ 66 kHz. The input sensitivity with sine wave alternating current is 10 ~ 600 Vrms. ◆ Measurement of an inverter power supply circuit may

cause a malfunction. ◆ Measurement with DC-coupled input is not possible.

5-4 Resistance Measurement (Ω)

Never apply voltage to the input terminals.

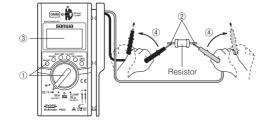
— ⚠ CAUTION —

— /N WARNIN

When high resistance is measured, the displayed value

may nuctuate due to external induction.				
Function	Max. rating input value	Measurement range		
Ω	66.0ΜΩ	660.0Ω,6.600kΩ,66.00kΩ, 660.0kΩ,6.600MΩ,66.0MΩ		

- 1) Applications: Measuring the resistance of resistors and
- 2) Measurement procedure Set the function switch to the Ω/ • N/ → position 2 Apply the red and black test pins to an object to
- 3 The reading is shown in the display. 4 After measurement, release the red and black test pins from the object measured.



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Approx. 1.2 V in other range ◆ Resistance cannot be measured when voltage is 5-5 Checking Continuity (***))

◆ If measurement is likely to be influenced by noise,

shield the object to measure with negative potential

(COM). If a finger touches a test pin during

measurement, measurement will be influenced by

the resistance in the human body, and that results in

 \spadesuit Open circuit voltage: Approx. 0.78 V in 660 Ω range

Never apply voltage to the input terminals.

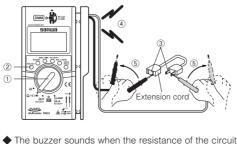
neasurement error

1) Applications: Checking the continuity of wiring and

selectina wires. 2) How to use) Set the function switch to the $\Omega/M/\Rightarrow$ position. 2) Select "•))" by pressing the SELECT button.

3 Apply the red and black test pins to a circuit or conductor wire to measure. 4 The continuity can be judged by whether the buzzer

sounds or not. ⑤ After measurement, release the red and black test pins from the object measured.



to be measured is less than approx. 30 Ω . ◆ The open circuit voltage between the input terminals is approx. 0.78 V.

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Test Leads

Test probe (red)

Test probe (black)

Removable test pin covers

When not covered: CAT. I 600V

When covered : CAT. II 300\

5-6 Testing Diodes (→)

Never apply voltage to the input terminals.

1) Applications: Testing the quality of diodes.

2) How to use

) Set the function switch to the Ω/•»/→ position. Select "➡" by pressing the SELECT button.

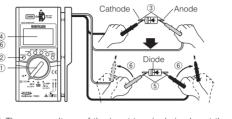
3 Apply the black test pins to the cathode of the diode

and the red test pin to the anode. 4 Make sure that the display shows a diode forward voltage drop.

⑤ After replacing the red and black test pins, connect the red test pin to the cathode of the diode and connect the black test pin to the anode.

⑥ Make sure display is the same as when the test lead is not connected (OL indication). Note: Successful completion of steps 4 and 5

indicates that there is no problem with the diode. After measurement, release the red and black test pins from the object measured.



◆ The open voltage of the input terminals is almost the same as the battery voltage

5-7 Capacitance Measurement (→)

Never apply voltage to the input terminals.

[6] MAINTENANCE

. This section is very important for safety. Read and understand the following instructions fully and maintain your instrument properly

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The instrument must be calibrated and inspected at least once a year to maintain its safety and accuracy.

6-1 Maintenance and Inspection Appearance

 Has the appearance been damaged by falling? Test leads

 Is the test lead cord damaged? • Is the core wire exposed at any place on the test

leads? If the built-in fuse is blown, current measurement is impossible. Make sure that the test leads are not cut, referring to the section 5-1.

6-2 Calibration The manufacturer may conduct calibration and inspection.

For more information, please contact your dealer.

6-3 Battery Replacement — ⚠ WARNING -

[8] SPECIFICATIONS

8-1 General Specifications

Over ranging indication

urrent measurement system | CT clamp

Range selection

Polarity selection

Sampling rate

liameter

AC sensoring

Max. clamp conductor

vironmental condition

perating temperature

nperature/humidity range

Accuracy-guaranteed

umidity range

numidity range

ower supply

Auto power off

Storage temperature/

ower consumption

mensions & weight

est lead length

Safety standard

EMC directive

Accessories

1. To avoid electric shock, do not remove the battery compartment cover when input is applied to the

measurement terminal and clamp sensor or when measurement is being performed. Be sure to confirm that the function switch is set to "OFF" before replacing the batteries.

Set the batteries with their polarities facing in the correct directions.

① Remove the two fixing screws from the battery compartment cover

② Slide the battery compartment cover downward to remove it.

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Max. 6600 count

display only)

"OL" mark indication

Automatic selection (-

Displayed when built-in

blinking in display

Approx. 3 times/sec

Average sensoring

condensation)

Operating altitude <2000 m,

23 ± 5°C, <80% RH (without

 $5 \sim 40$ °C, <80% RH (without

-10 ~ 50°C, <80% RH

(without condensation)

Two LR03 alkaline batteries

Power off after approx. 30

minutes since last operation

Approx. 7 mW TYP (at DCV)

130 (L) x 75 (W) 19.9 (D) mm

approx. 160 g (including

Approx. 60 cm for both red

IEC61010-1, CAT, III 300 V, CAT

II 600 V, IEC61010-031:2008,

batteries)

and black

IEC61326

- 21 -

IEC61010-2-032

Instruction manua

indoor use, pollution degree I

batteries are exhausted (to

2.3 V or less) with - lit or

Double integral method

Auto and manual ranges

CAT I: Secondary electrical circuits connected to an AC electrical outlet through a transformer or similar CAT II: Primary electrical circuits in equipment connected to

- 18 -

an AC electrical outlet by a power cord. CAT III:Primary electrical circuits of heavy equipment connected directly to the distribution panel, and feeders from the distribution panel to outlets.

This is not suitable for measurement of electrolytic

1) Applications: Measuring the capacitance of low leakage

2) Apply the red and black test pins to a conductor to

(4) After measurement, release the red and black test

◆ When the 6.600nF or 66.00nF range is used, use the

◆ Readings are unstable because of stray capacitance

- 14 -

3 Replace both of the two batteries in the battery

4) Place the battery compartment cover and tighten the

The batteries incorporated when shipped from the

factory are monitor batteries, so their service life may be

shorter than that of brand-new batteries. A monitor

battery is a type of battery used to check the functions of

- ⚠ CAUTION

The panel and the case are not resistant to volatile

solvent and must not be cleaned with thinner or alcohol.

The panel and the case are not resistant to heat. Do not

place the instrument near heat-generating devices (such

Do not store the instrument, in a place where it may be

For storing the instrument, avoid hot, cold or humid

places or places under direct sunlight or where

When the instrument is not going to be used for

subjected to vibration or from where it may fall.

extended time, be sure to remove the batterie

About the batteries when shipped from the factory

and performance of the product.

REL mode to set the values that remain on the

display to "0" (cancelled) before the measurement is

Measurement range

6.600nF,66.00nF,660.0nF

6.600uF.66.00uF.660.0uf

6.600mF,66.00mF

. Discharge the capacitance before measurement.

condenser such as a large leakage condenser.

It takes a while to measure large capacitance.

Function | Max. input rating value |

66.00mF

condenser such as film condenser

3 Read the value on the display.

in test leads or noise.

fixing screws.

6-4 Storage

as a soldering iron).

OVERVOLTAGE CATEGORY

condensation is anticipated.

pins from the object measured.

1) Set the function switch to the 4 position

8-2 Measurement Range and Accuracy

Function	Range	Accuracy	Input impedance	Remarks
DCV == DC Voltage	660.0 mV	±(1.1%rdg+3dgt)	≥100 MΩ	
	6.600 V	±(0.7%rdg+3dgt)	Approx. 11 MΩ	1
	66.00 V	±(0.8%rdg+3dgt)	1	
	600.0 VΩ	±(1.1%rdg+3dgt)	Approx. 10 MΩ	
ACV ∼	660.0 mV	±(1.6%rdg+10dgt)	≥100 MΩ	Accuracy- guaranteed range: 40 ~ 100 Hz
	6.600 V	±(1.4%rdg+6dgt)	Approx. 11 MΩ	Accuracy-
AC Voltage	66.00 V		Αρρτοχ. 10 ΜΩ	guaranteed
o rollago	600.0 V			range: 40 ~ 400 Hz • Accuracy in the case of sin wave
Resistance Ω	660.0 Ω	±(1.5%rdg+7dgt)	Open voltage: Approx. 1.2 V	
	6.600 kΩ	±(0.9%rdg+3dgt)	Open voltage: Approx. 0.78 V The measuring current changes according to the resistance of the resistor to	
	66.00 kΩ			
	660.0 kΩ			
	6.600 MΩ	±(2.0%rdg+3dgt)		
	66.0 MΩ	±(4.0%rdg+3dgt)	measure.	
Testing Diode →	Open voltage: Almost battery voltage			

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5-8 Clamp Current Measurement (CLAMP A)

— ⚠ WARNING

- 1. The clamp sensor of this instrument is exclusively for low voltage. Perform the clamp current measurement on a
- line with 600 V or less. Do not turn the function switch during measurement
- . During measurement, do not hold the clamp sensor at any point beyond the barrier.

To prevent electric shock, be sure to store the test probe and test lead in their designated storage compartments.

- . The measurable diameter of a conductor is 10 mm. Do not force a cable with an outer diameter of more than 10 mm into the clamp sensor section. Also do not apply external force to the clamp sensor section.
- . Make sure that the conductor to be measured is aligned with the center of the arrows on the clamp sensor Otherwise, a measurement error will result.
- Do not let this instrument come near a conductor in which large current flows or place it on a strong magnetic field. Such an environment may cause a current value to be displayed even though no measurement is made (an error may occur). Since the clamp sensor of this instrument is a U-shaped open-type sensor, it is more susceptible to such an environment compared than a closed-type sensor.

DCA	DC100.0A	DC100.0A				
ACA	AC100.0A	AC100.0A				
Applications DCA: Measures the current consumption of devices such as an automotive battery.						

Function Max. input rating value Measurement range

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Sanwa offers comprehensive warranty services to its end-users and

to its product resellers. Under Sanwa's general warranty policy, each

instrument is warranted to be free from defects in workmanship or

material under normal use for the period of one (1) year from the

his warranty policy is valid within the country of purchase only, and

applied only to the product purchased from Sanwa authorized agent

Sanwa reserves the right to inspect all warranty claims to determine

the extent to which the warranty policy shall apply. This warranty

shall not apply to fuses, disposables batteries, or any product or

1. A failure due to improper handling or use that deviates

2. A failure due to inadequate repair or modification by

parts, which have been subject to one of the following causes

people other than Sanwa service personnel.

such as fire, flood and other natural disaster

1. Customer name, address, and contact information

Please contact Sanwa authorized agent / distributor /

service provider, listed in our website, in your country with

above information. An instrument sent to Sanwa / agent /

distributor without those information will be returned to the

1) Prior to requesting repair, please check the following

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(5.0%rdg+10dgt)

 \pm (7.0%rdg+10dgt)

Capacity and installation polarity of the built-in

Non-operation due to a discharged battery.

from the instruction manual.

dropping after the purchase.

3. Description of product configuration

. Where you purchased the product

• Continuity of the test leads.

66.00 nF

660.0 nF

6.600 uF

66.00 µF

660.0 uF

6.600 mF

6.600 kHz

66.00 kHz

. Description of problem

. Product Serial Number

6. Proof of Date-of-Purchase

4. Model Number

customer.

[7] AFTER-SALE SERVICE

-1 Warranty and Provision

date of purchase.

or distributor.

7-2 Repair

- ACA: Measures the sine wave alternating current with 40 ~ 400 Hz frequency of power supply facilities. 2) Measurement procedure 1) Raise the clamp sensor from the rear of the main unit
- ② Set the function switch to the CLAMP A position, and between 40 ~ 400 Hz. press the SELECT button to select DCA or ACA. DCA: Use the ZERO set function to set the display value to "0.0A" before measurement.

cause a malfunction.

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conditions stipulated in "7-1 Warranty and Provision". Repair after the warranty period has expired: In some cases, repair and transportation cost may become higher than the price of the product. Please contact Sanwa authorized agent / service provider in advance. The minimum retention period of service

become unavailable for reasons of discontinuation of manufacture, etc., the retention period may become shorter accordingly. Precautions when sending the product to be repaired To ensure the safety of the product during transportation, place the product in a box that is large than the product 5 times or more in volume and fill

cushion materials fully and then clearly mark "Repair 3. A failure due to causes not attributable to this product Product Enclosed" on the box surface. The cost of sending and returning the product shall be borne by the customer. 5. A failure or damage due to transportation, relocation or 7-3 SANWA Website

customers are asked to provide the following information when





sin wave AC • 50/60 Hz rectangular wave ±(0.5%rdg+5dgt) accuracy at 10 ~ 60 Vpp 80.0% Accuracy was measured 100.0 A after canceling display value

Current

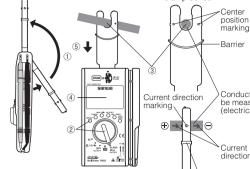
== Direct

ACA

Note: Correct measurement may not be possible in areas exposed to strong magnetic fields generated by electrical equipment such as a transformer or large current path, electromagnetic waves generated by wireless equipment, or areas where electrostatic charges are generated.

Display value: 100.0 mV

 $\pm (100.0 \text{ mV} \times 1.1\% \pm 3 \text{dgt}) = \pm 1.4$ 100.0 mV \pm 1.4 mV (in a range of 98.6 ~ 101.4 mV)



◆ When the position of this instrument is changed during DCA measurement, the display may fluctuate due to geomagnetism. ◆ Because the AC sensoring system of this instrument

value will occur with waveforms other than sine ◆ Accuracy is quaranteed in ACA measurement

◆ Measurement of an inverter power supply circuit may

2) Repair during the warranty period:

he failed meter will be repaired in accordance with the

is an average value system, an error in the measured

functional parts is 6 years after the discontinuation of manufacture. This retention period is the repair warranty period. Please note, however, if such functional parts

http://www.sanwa-meter.co.jp E-mail: exp_sales@sanwa-meter.co.jp

by the ZERO set function. Accuracy-guaranteed range: 40 ~ 400 Hz Accuracy in the case of sir

Accuracy was measured

by the REL function

Accuracy with ir

after canceling display value

Measurement range: 20 Hz

sensitivity of 10 ~ 600 Vrms

Accuracy calculation Ex.) Measurement of DC voltage (DCmV)

Specifications and external appearance of the product described above may be revised for modified without

- 24 -

100.0 A ±(2.0%rdg+5dgt) ∼ Alternating rdg: reading dgt: digits

Range accuracy: 660 mV range ... ± (1.1%rdg±3dgt)

Note: 3 dgt in the 660 mV range corresponds to 0.3 mV.

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clamp sensor.

measured is irrelevant.

is pointed in the opposite direction, "-" will be

ACA: The current direction of the object to be

4 Read the measurement value in the display.

direction as the current direction marking. If it

⑤ After measurement, remove the conductor from the

 ACA: No adjustment is necessary. 3 Align one line of the conductor to be measured with

• DCA: Point the object to be measured in the same

the center of the arrows on the clamp sensor.