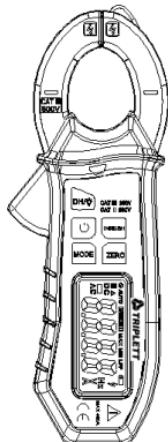


User Manual



CM24 400A AC/DC TRMS Clamp



Introduction

Congratulations on your purchase of the Triplett CM24 400A True RMS AC/DC Current Clamp meter. The True RMS AC/DC Current Clamp meter features:

- Auto Power OFF
- Inrush current measurement
- Data Hold
- DC zero function
- Backlit LCD display
- Non-contact AC voltage detection

Safety

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.
- When the instrument is not in use, press the ON/OFF key to turn off the meter.
- Remove the battery if meter is to be stored for longer than 60 days.

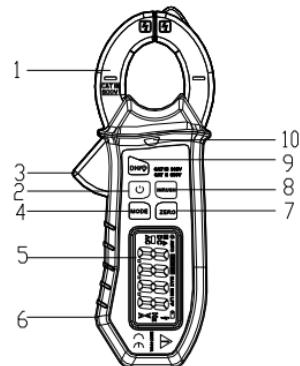
CAUTIONS

- Improper use of this meter can cause damage, shock, injury or death. Read and understand this user manual before operating the meter.
- Always remove the test leads before replacing the battery.
- 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.
- Voltage checks on electrical outlets can be difficult and misleading because of the uncertainty of connection to the recessed electrical contacts. Other means should be used to ensure that the terminals are not "live".

Description

Meter Description

1. Current Clamp
2. ON/OFF Button
3. Clamp Trigger
4. MODE Select Button
5. LCD Display
6. Battery Cover
7. DC ZERO Button
8. INRUSH Button
9. HOLD/Backlight Button
10. Non-contact AC Voltage Indicator LED



Display icons Description



Data Hold

Minus sign

Negative reading display

0 to 3999

Measurement display digits



REL/DCA Zero

AUTO

Auto Range mode

DC/AC

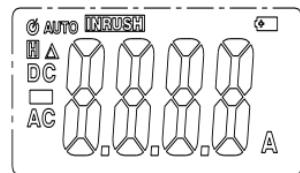
Direct Current / Alternating Current



Low battery



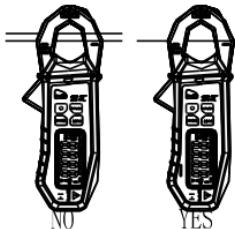
Auto power off



Operation

AC/DC Current Measurements

1. Instrument can automatically switch from 40.00A range to 400.0A range.
2. Use the **MODE** button to select AC or DC.
3. Press the **DC Zero** button to zero the meter display.
4. Press the trigger to open jaw. Fully enclose only one conductor. For optimum results, center the conductor in the jaw.
5. The clamp meter LCD will display the reading.



Data Hold

To freeze the LCD reading, press the **HOLD** button. While data hold is active, the **HOLD** icon appears on the LCD. Press the **HOLD** button again to return to normal operation.

DC Zero

1. Press the **DC Zero** button to zero the display. “” will appear in the display. The displayed reading is now the actual value less the stored “zero” value.
2. To exit this mode, press the DC Zero button until “<img alt="triangle symbol" data-bbox="665 645 705 675}” is no longer in the display.

INRUSH Button

In the AC current measurement mode, press INRUSH key to enter the 400.0A inrush current measurement mode, the measurement is ready, open the power equipment, instantaneous surge current read value on the display. If you want to measure a smaller inrush current, it is to enter the 40.00A inrush current measurement mode, long press INRUSH key to 40.00A measurement range, repeat the above operation, Short press INRUSH key to exit to the normal measurement mode. In INRUSH mode, the instrument will display the current measurement over the threshold, the effective value of AC current within 100mS before. 40A range measurement range (3~40A,50/60Hz); 400A range measurement range (10~400A,50/60Hz); accuracy is $\pm 10\%$.

LCD Backlight Button



The LCD is equipped with backlighting for easier viewing, especially in dimly lit areas. Long press the backlight button to turn the backlight on. Press again to turn the backlight off.

Automatic Power OFF

In order to conserve battery life, the meter will automatically turn off after approximately 15 minutes. To turn the meter on again, please press "ON/OFF" key again.

Maintenance

Cleaning and Storage

Periodically wipe the case with a damp cloth and mild detergent; do not use a 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. Remove the Phillips head screw that secures the rear battery door
2. Open the battery compartment
3. Replace the two AAA battery
4. Secure the battery compartment

Specifications

Function	Range & Resolution	Accuracy (% of reading + digits)
AC Current 50/60 Hz True RMS	40.00A AC	± (2.5% + 10d)
	400.0A AC	± (2.8% + 8d)
AC Current 400 Hz True RMS	40.00A AC	± (2.5% + 10d)
	400.0A AC	± (2.8% + 8d)
DC Current	40.00A DC	± (2.5% + 10d)
	400.0A DC	± (2.8% + 8d)
Non Contact Voltage	90 to 600V (AC)	Unspecified

Note: Accuracy is given as ±(% of reading + counts of least significant digit) at 23 °C /±5 , with relative humidity less than 80%RH.

General Specifications

Clamp jaw opening	1" (25mm) approx.
Display	3-3/4 digits (4000 counts) backlit LCD
Low Battery indication	'  ' is displayed
Over-range indication	'OL' display
AC response	True RMS (AAC and VAC)

ACA Bandwidth	50/60Hz(ALL WAVE) ;50Hz to 400Hz(SINE WAVE)
Operating Temperature	41°F to 104°F (5°C to 40°C)
Storage Temperature	-4°F to 140°F (-20°C to 60°C)
Operating Humidity	Max 80% up to 87°F (31°C) decreasing linearly to 50% at 104°F(40°C)
Storage Humidity	<80%
Operating Altitude	7000ft. (2000meters) maximum.
Battery	Two AAA Battery
Auto power OFF	After approx. 15 minutes
Safety	For indoor use and in accordance with the requirements for double insulation to IEC1010-1 (2001): EN61010-1 (2001) Overvoltage Category III 300V, Pollution Degree 2.

Warranty Information

Triplett / Jewell Instruments extends the following warranty to the original purchaser of these goods for use. Triplett warrants to the original purchaser for use that the products sold by it will be free from defects in workmanship and material for a period of (1) one year from the date of purchase. This warranty does not apply to any of our products which have been repaired or altered by unauthorized persons in any way or purchased from unauthorized distributors so as, in our sole judgment, to injure their stability or reliability, or which have been subject to misuse, abuse, misapplication, negligence, accident or which have had the serial numbers altered, defaced, or removed. Accessories, including batteries are not covered by this warranty

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