C.A 5292 / C.A 5293, *ASYC IV*

Portable 100,000 cts Graphic Multimeter

This guide is available in various laguages on the CD supplied with the instrument.

We thank you for your confidence in the quality of your products.

A complete user's manual is also provided on the CD supplied with the instrument.
It can be download from : www.chauvin-arnoux.com.

Attention : for your safety and to protect your property, please read carefully the safety datasheet enclosed with your instrument.

This multimeter complies with the EN 61010-2-033 CAT IV 600 V – CAT III 1000 V, safety standard on double insulation for electronic measuring instruments. IP 67 as per standard IEC 60529. Then, if the instrument is immersed, it must be dried, in particular the terminal block, before it can be used again.

This instrument has been designed for use indoors :
- in an environment with pollution level 2,
- at an altitude of less than 2000 m,
- at a temperature between 0°C and 50°C,
- with relative humidity < 80 % up to 35 °C.

It can be used for measurements on the circuits of :
- Category III installations for voltages up to 1,000 V (AC or DC) relative to earth.
- Category IV installations for voltages up to 600 V (AC or DC) relative to earth.

For safety reasons, only use suitable cords supplied with the instrument: they comply with the EN 61010-031 standard. Before each use, make sure that they are in perfect condition.

When the instrument is connected to the measuring circuits, never touch a terminal which is not in use. Use only suitable accessories delivered with the instrument or approved by the manufacturer.
If the measurement category of the accessory is different from that of the instrument, the lowest category applies to the unit.

	C.A 5292	*C.A 5293*
Display	Graphic color (70 x 52)	
Power supply	1 set of AA/R6 batteries or 1 set of 4-Ni-Mh storage batteries	
Counts	100 000	
Communication	IR / USB (Bluetooth, optional)	

FUSE AND BATTERIES OR RECHARGEABLE BATTERIES

Fuse : 11 A : 10 x 38 – 1000 V
F – breaking capacity : > 18 kA
4 batteries : 1.5 V AA LR6 or batteries 1.2 V Ni MH LSD

TERMINAL BLOCK

Terminal block : with 3 4-m banana inputs and an optical connector for USB communication.
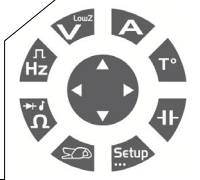

DISPLAY OF THE CONNECTION ON THE SCREEN

VOLTAGE : VAC, VDC, VAC+DC

1. Activate « **V »**, then press **F1**, **F2**, **F3**, **F4** to select the coupling :
- **AC**,
- **DC**,
- **AC+DC** or
- **VlowZ**.

Configuration SETUP → MESURE to adjust the parameters : filters, impedance, reference...

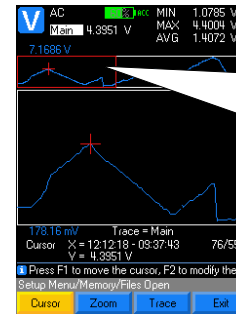**2.** Graphic mode (default), but select **Meas** for another display
- **GRAPH** graphical history of the measurements
- **REL** relative measurement
- **SURV** for MIN/MAX/AVG (time stamped)
- **SPEC** to get the specs
- **MEAS+** to select a secondary function
- **WFORM** wave form

3. Select **Mem…** to save or stop (up to 30 000 measurements, depending on model)
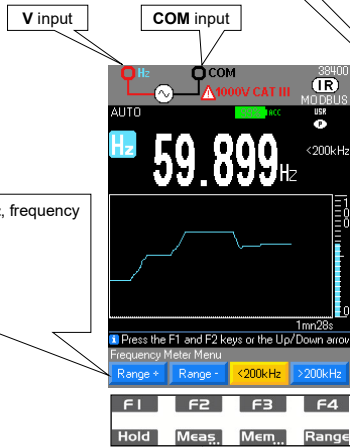Consult data by long press on **Mem...**

GRAPHIC DISPLAY OF Mem IN VAC+DC MODE

Delimitation of the enlarged area.

Use F1/F2/F3 to select the object to be modified

(cursor, Zoom or Trace) and the arrows to change the value.

FREQUENCY : Hz

1. Activate **Hz**

2. Select **Range ±**, frequency range and
< 200 kHz or
> 200 kHz

By the keys.

3. Select **Meas…**, then
- **REL** relative measurement
- **SURV** for tiem stamped MIN/MAX/AVG
- **SPEC** to obtain the specifications.
- **MEAS+** to select a secondary function among : MATCH, DCY, PER, PW+/-, CNT+/-

RESISTANCE : Ω, DIODE, CONTINUITY

1. Activate **Ω,** by pressing this key :
- **F2** accesses ♪ (continuity)
- **F3** accesses 100 Ohm range
- **F4** selects the diodes (4 V or 26 V diode test) or subsequent presses
2. Select **Meas…,** then
- **REL** relative measurement
- **SURV** for time-stamped MIN/MAX/AVG
- **SPEC** to obtain the specifications
- **MEAS+** for the **MATH** secondary function

CAPACITY : ⊣⊢

RUN is displayed when the measurements is running and OL is diplayed if the value is > range or if there is a short-circuit.

1. Activate ⊣⊢, by pressing this key.
Pressing :
- **F1** accesses **Range+**
- **F2** accesses **Range-**

Select ranges by those keys.
2. Select **Meas…**, then :
- **REL** relative measurement
- **SURV** for time-stamped MIN/MAX/AVG
- **SPEC** to obtain the specifications.

TEMPERATURE
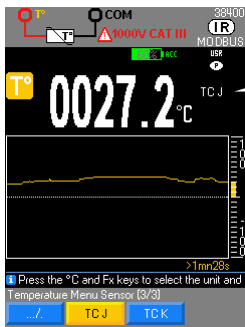
°C, °F, K in TL/TJ or Pt100/Pt1000

V input | **COM input**

Display in REL mode :

REL
Reference
Δ Difference
Δ% difference in %
A long press on Meas…, resets the reference.

Activate T°
- **1st** press on F1 / F2 / F3 → °C, °F, K
- **2nd** press → Pt100, Pt1000
- **3rd** press → TC J or TC K
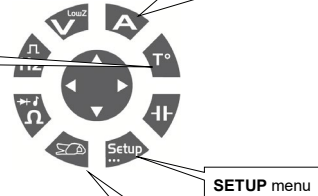
°C by Pt1000 graphic display :

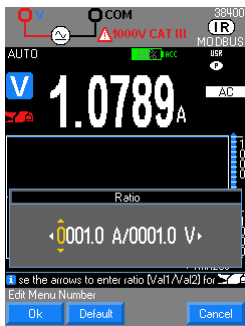Pt100
Pt1000
TC J
TC K

DIRECT MEASUREMENT OF CURRENT : A

COM input | **A input**

1. Activate **A** and then press **F1, F2, F3** to choose the coupling :
   - **AC,**
   - **DC** or
   - **AC+DC**
2. Select **SETUP → MESURE** to adjust the parameters : filters, impedance, reference, etc.

CURRENT WITH CLAMP

1. Activate the **« clamp »** function.
2. Select the coupling, then 2nd press on SETUP menu : **MESURE** or input **V** or **A**.
3. Enter te **ratio** of the clamp 0001.0 A / 0001.0 V (default) by pressing
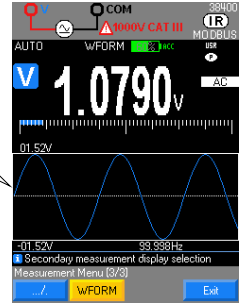4. Select the unit, **A** (default).

SECONDARY MODES ACCESSIBLE VIA MEAS…

F1	F2	F3	F4
Hold	Meas…	Mem…	Range

Activate or deactivate the selected mode by pressing the **MEAS…** key then **F1 / F2 / F3 / F4**.

- **GRAPH :** graphic display
- **REL :** relative mode (REF, Δ, Δ%)
- **SURV :** surveillance mode (MIN, MAX, AVG)
- **SPEC :** specifications (SMIN, SMAX, %, digits)
- **MEAS+ :** to access the secondary functions
- **WFORM :** to view the waveform

Select the V or A waveform. The **Waveform** mode is only available in AC for frequencies between 10 and 600 Hz. It can be used to view the waveforms and displays the MIN and MAX

SETUP MENU :

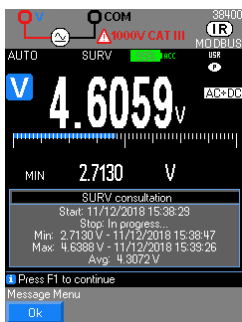The SETUP menu sets the parameters through main adjustments and 3 levels :

1. **General Setup**
   - **Util :** lighting, standby, beep, language, clock
   - **Com. :** IR or BT type, baud IR, protocol : SCPI or MODBUS
   - **Power supply :** battery or rechargeable battery, capacity

2. **Measurement configuration**
   - **Measure :** filter on or off, impedance, reference, dBm and W
   - **Clamp :** V or A measurement, ratio, unit
   - **Math :** measurement, serial number, software version

3. **Configuration et personnalisation MTX**
   - **Memory :** files, numbers or recordings, frequency
   - **Config :** factory configuration, USER or BASIC start
   - **About :** model, serial number, software version.

SURVEILLANCE MODE : MEAS/SURV

Activate or start deactivate or stop the **SURV** mode by pressing on **F1/F2**

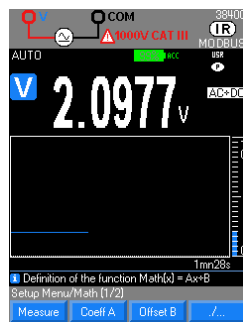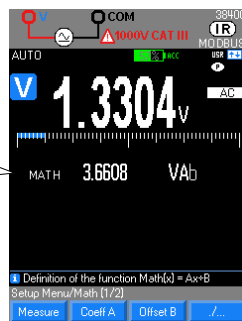**Pressing F3 in SURV opens a consultation window of CONSULT record :**

MATH FUNCTION

Function Ax + B configurable to obtain a direct reading of the original quantity.

1. Open « Menu » using the **SETUP** key, then **MATH**.
2. Select the V, A, Ω or Hz function by the keys F1, F2, F3, F4.
3. Select and enter the A or B coefficients.
4. Select the unit.

Parameters to be adjuted :

MATH function, recall in the secondary function V Meas…/MEAS+ :

MATH function result in secondary function and displayed main quantity.

MEMORY MODE : Mem…

1. Activate by the **SETUP** menu or long press on **Mem** :
2. Select and modify the parameters :
   - **Files :** list of the stored files, by date and time
   - **Nb rec. :** number of recordings → max. 10,000 or 30,000 cts depending on the model.
   - **Freq. :** recording frequency in h, min, s, ms

F1	F2	F3	F4
Hold	Meas…	Mem…	Range

Activate / deactivate the **MEM** auto-recording mode by a short press : max. 10 or 30 sequences, depending on the model.

A long press on **Mem…** opens the record consultation menu : File → F1 :
1. Display or open the list by F1.
2. Select a file with the keys
3. Validate it to display by the **F1** key, then **Open**.
4. **Erase** a sequence or **Erase all** memory sequences.

Incrementing the number of steps since startup sequence.