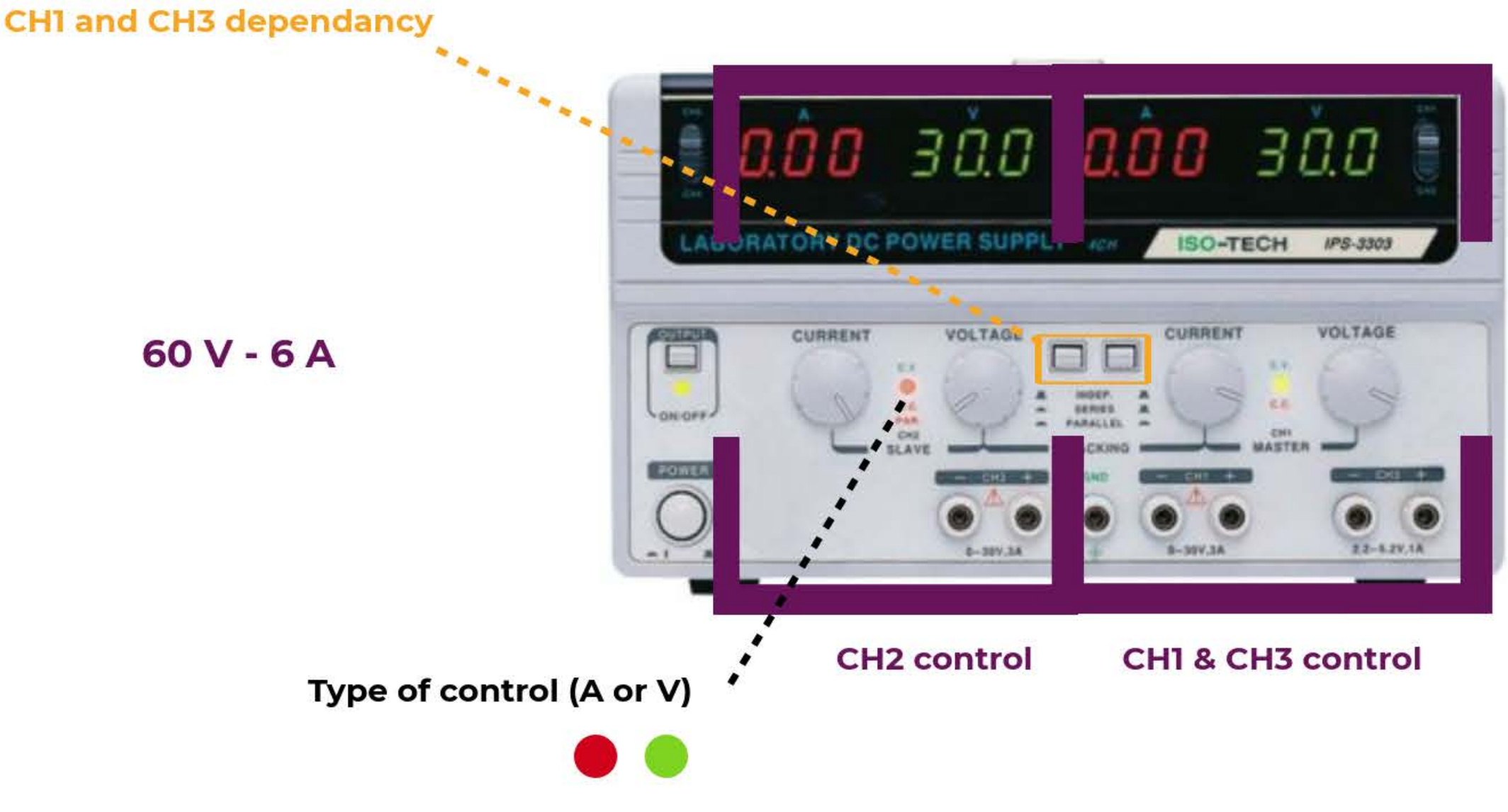
Power supply



With the power switched OFF:

1. Check that the dependancy buttons are unpressed

2. Choose the lines you will use (CH1, CH2 and CH3)

3. Connect the + and the - of the selected line to your circuit

With the power switched ON:

4. Set your A and V with the knobs

5. Notice the type of control

6. Activate the output (and desactivate at the end of your session!)

Warnings:

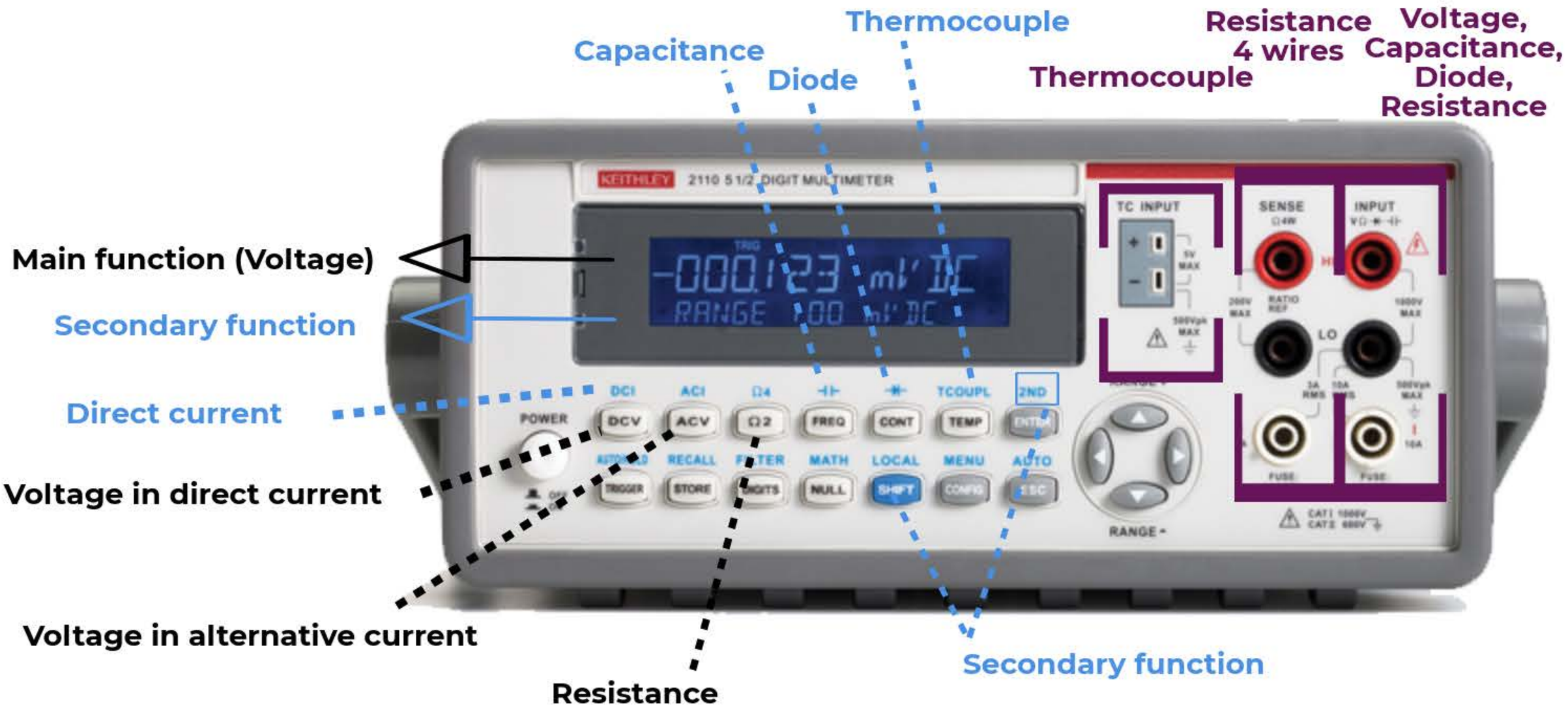
Voltage above 60 V DC can be lethal

If series dependancy is activated CH1 and CH3 voltages sum up

Remarks:

CH3 has a [2.2-5.2] voltage range with a fixed 3A. It suits TTL circuits.

Multimeter



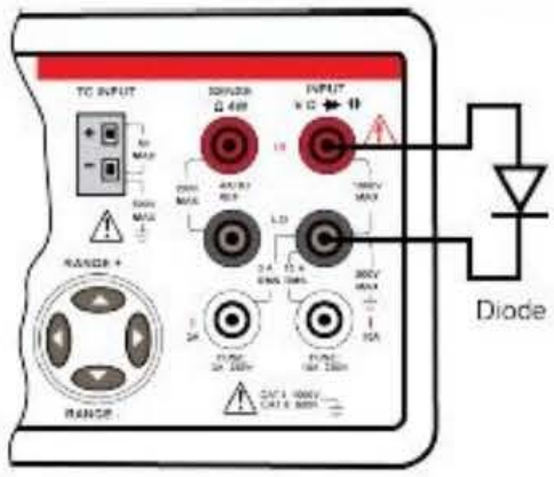
With the power switched OFF:

1. Connect the + and - of your circuit to the wished measurement plugs

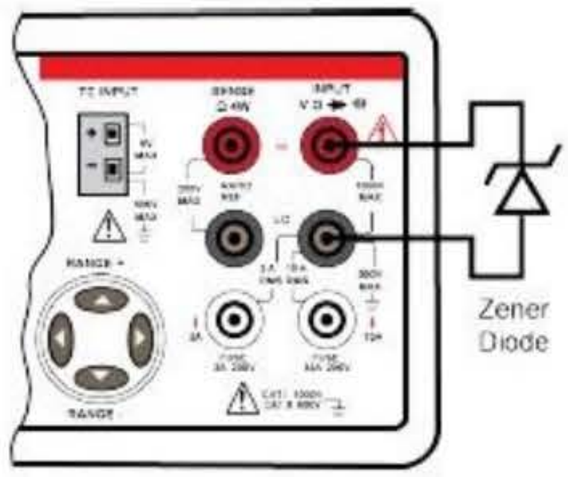
With the power switched ON:

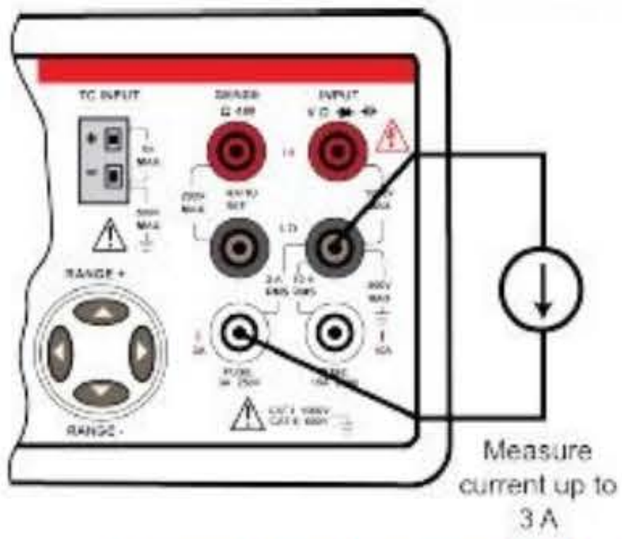
2. Select the main and secondary displays with the Shift button

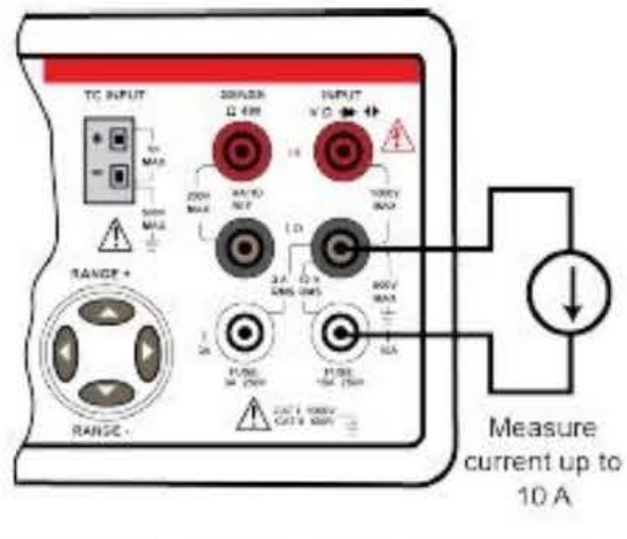
3. Select the measurement range



Plugging diode & Zener diode







Plugging for current depending on the A range

Waveform generator

With the power switched OFF:

1. Connect the + and - of your circuit to the plugs

With the power switched ON:

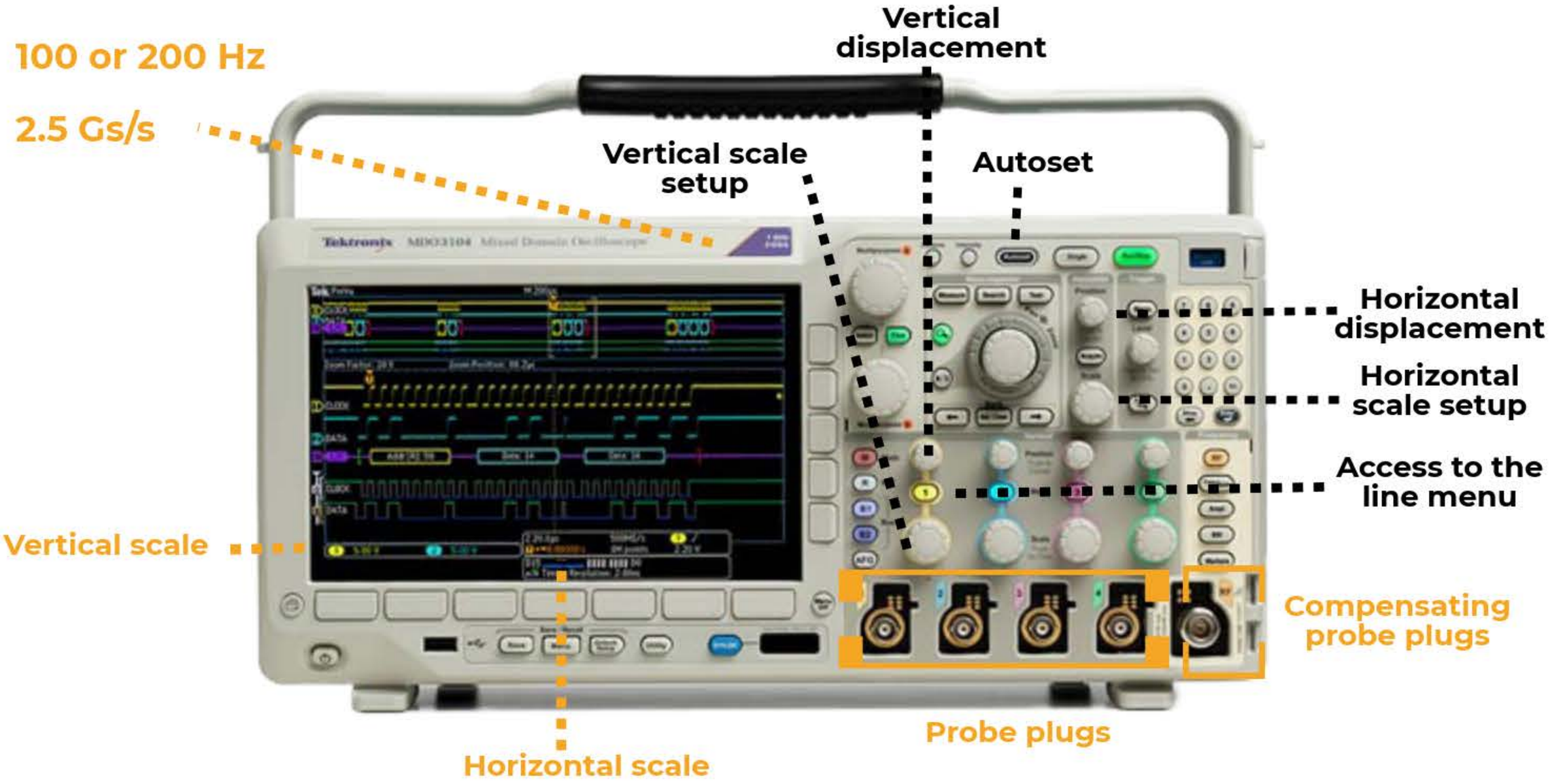
2. Press the Graph button

2. Select the waveform

3. Define the frequency, the period, the amplitude, the DC offset and the polarity with the navigation wheel and the cursors

4. Press the Output button

Oscilloscope



With the power switched OFF:

1. Connect the probes to your circuit

With the power switched ON:

2. Setup the horizontal and vertical scales with the knobs
3. Press the coloured probe number button to open the associated menu
4. Select AC ou DC coupling

Remarks:

Before using a new probe make sure it is well compensated (After pressing Autoset and connecting the probe to the bottom right of your oscilloscope you should see a square signal).

When several probes are connected it is possible for example to compare the AC and DC components of a signal or do math operations on them such as subtraction.

When a trigger is defined the signal is displays only if it exceeds a certain threshold.

It is possible to monitor communications such as serial with an oscilloscope.

Available models

Multimeter

Model Keithley 2110
Range 1000 V - 10 A
Precision up to 1 µV - 0.1 µA function of the A or V range
up to 50 000 s/s

Power supply

Model Iso-Tech IPS 3303
Range 60V - 6A
Precision 3 mV- 3 mA

Model Iso-Tech IPS 3610
Range 36V - 10A
Precision 5 mV - 3 mA

Model Keithley Programmable Power supply 2200-72-1
Range 72 V - 1.5 A
Precision 1 mV - 0.1 mA

Oscilloscope

Model MDO 3024
Range 200 MHz
Precision 2.5 Gs/s

Model MDO 3014
Range 100 MHz
Precision 2.5 Gs/s

Waveform generator

Model Keithley 3390
Range 50 Hz
Precision 125 Ms/s

Inventaire électronique

Pour souder

Station de soudure

Pannes disponible [0,2 - 1,2 - 1,6 - 3,2mm]

Brasure | Pâte de contact | Flux

Troisième main | Loupe

Pour dessouder

Tresse à dessouder

Stylo pompe

Pistolet à air chaud

Extremité panne pince

Pour contrôler

Multimètre - test de continuité

Microscope digital (+ CD d'installation)

Microscope Leica

Petit outillage

Pince à dénuder | Pince fine

Pince à couper | Sertisseuse

Ciseau d'électricien

Soudure réussie !