

# USB DATA ACQUISITION & PROCESSING

**12 analog inputs  $\pm 30$  V**  
**4 analog inputs  $\pm 400$  V**  
**8 digital inputs**

**16 single-ended / 8 differential channels**

**16-channel oscilloscope**  
**(With physical values display)**

**Standalone, powered by USB**

**Protected case**

*Easy-to-use and intuitive*

**250 kHz**

**Simultaneous  
 analog  
 (single-ended or differential)  
 and  
 digital inputs**



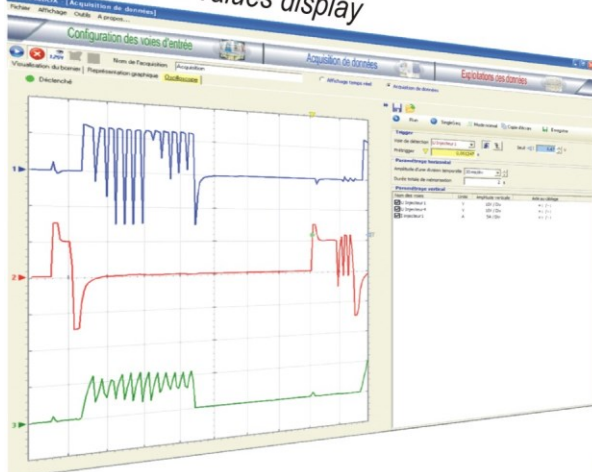
## Adapted to Bac & Bac Pro (French National Education):

- . Playful and intuitive setting
- . Helpful wiring assistant
- . Conversion into physical value (setting by representing the sensor's conversion curve)
- . Pictures animated with acquisition data

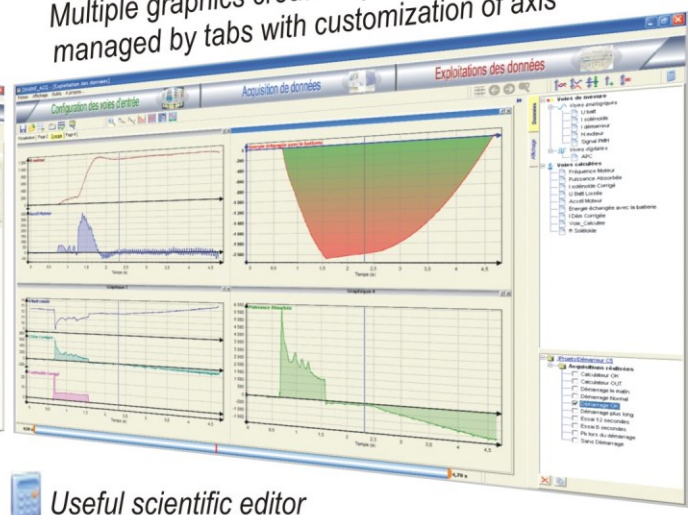
## Adapted to BTS (French National Education):

- . Particularly adapted to teaching of systems study in BTS AVA (automotive after-sales)
- . Easy to use thanks to various modes of acquisition triggering
- . Interpretation of data facilitated by the quality of its graphics and the power and flexibility of its scientific editor

*Oscilloscope mode  
 with physical values display*



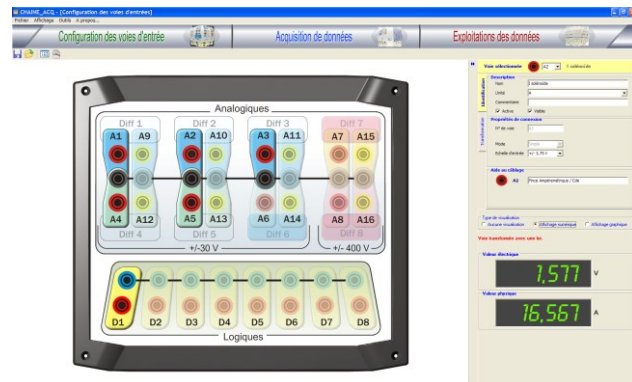
*Multiple graphics created by drag & drop  
 managed by tabs with customization of axis*



*Useful scientific editor*

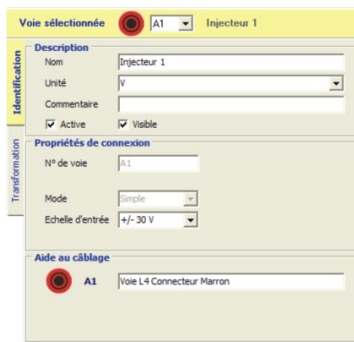


## Input channels settings



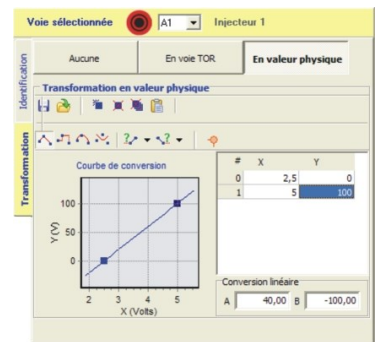
- Graphical selection of channels to use by clicking on the image of the case
- Automatic creation of wiring help (printed as table and image).

## Channel identification:



## Channel conversion:

- into physical value
- into 0 or 1 according to thresholds



## Data acquisition & recording

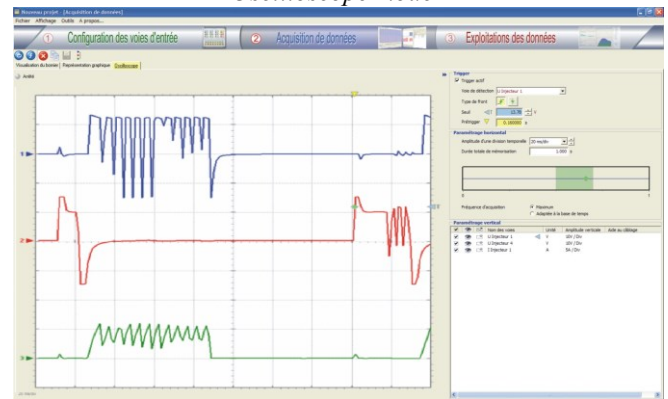


### Acquisition mode



## Acquisition conditions & Oscilloscope mode:

### Oscilloscope mode



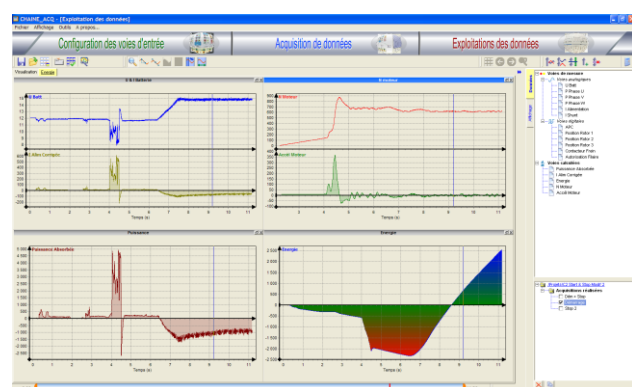
Acquisition data are recorded in data processing section

## Phenomena analysis & data processing



## Phenomena analysis & Data processing:

- Multiple views managed by tabs
- Axis customization in each view
- Measurement tools:
  - Slope
  - Tangent line in one point
  - Definite integral with mean value
  - Rising-edge counter
  - Measure of duty cycle
  - Measure of duration and frequency
- Easy data import by « copy & paste »



- Scientific editor:
  - Basic mathematical functions
  - Moving average
  - Data smoothing
  - First and second derivative
  - Primitive – Antiderivative
  - Transformation into 0 or 1 according to thresholds
  - Frequency variation computation
  - Duty cycle variation computation (low and high)

