

CHRONOEXE

R&D

Measurement interface for ballistic chronographs

Functions

COM ☒ — Select COM port

OPEN — Open / Close COM port

LOAD — Load data from a TXT or CSV file

SAVE — Save data to a TXT or CSV file

CLEAR — Clear data

0.54 g — Projectile weight (g-grams, gr-grains)

☐ ☒ — Chart : Automatic scrolling of SHOTS axis / dynamic scaling

☒ ☐ — Mix units (J, m/s, grains), (ft-lb, ft/s, grams)

☒ ☐ — Switch between Metric and Imperial units

☒ ☐ — Auto, Auto50: Dynamic scaling of the VELOCITY axis

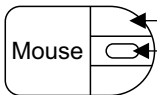
X0 — Jump to the start of the SHOTS axis


XN — Jump to the end of the SHOTS axis

+ — Zoom in / Zoom out on the SHOTS axis

- — Zoom in / Zoom out on the SHOTS axis

LPM (Left Mouse Button) – Drag/pan the chart

Mouse  — SCROLL: Zoom in / Zoom out of the VELOCITY axis

 — Mouse Cursor on point
Point parameters are displayed above the chart

123.00 — Mouse Cursor on the unit
Point parameters are displayed above the chart



Connect to BLE on app startup

R — Refresh screen or CTRL+R

SYM — Symmetry (chart)

CMP — Compare chart with file data

dV — Velocity deviations (chart)

IMG — Export chart and statistics to a JPG image

SCAN — Scan for Bluetooth LE devices

CONNECT — Connect to Bluetooth LE

Keyboard Shortcuts

- CTRL+R Refresh screen
- CTRL+T Change data file format (CSV, TXT)
- CTRL+F Enable hybrid filter (chart filtering)
- CTRL+P Conversion of kinetic energy to IPSC Power Factor
- CTRL+O Conversion of kinetic energy to Power Factor in 0.0 format

Program startup

- Before use, please read the license terms: License.txt.
- Connect the chronograph to the PC via USB, USB-COM cable or Bluetooth.
- Turn on the chronograph and run the program (EXE file).
- Select the correct COM port and click OPEN to establish a connection, via cable or Bluetooth Classic.
- Use SCAN to detect the device and CONNECT to pair with Bluetooth LE.
- Program for Windows 7 SP1, Windows 8, Windows 10, Windows 11.
- Run as administrator or disable antivirus software (optional).

INI file format

During the first launch, a configuration file *.ini is created.
Below are the parameters for user editing.

[Settings]		[BLE]	
Style=1	← 0 - 4 Form style	Last=	
TXT=0	← File format TXT=0, CSV=1	[FILTER]	← Logical filter
Multiplier=1		Filter=0	
MultiplierG=1		Shots=S(~)	
CheckBoxScroll=1		Velocity=V(~)	
ComPort=COM3		[TXTCSV]	← File SAVE folder configuration
OpenCom=	← COM connection 0 - manual, 1 - auto	Folder=./MYSHOTS	
CheckBoxAuto=0		FileName=Chrono_\$	
CheckBoxAuto50=0		INDEX=001	← Configuration of the folder for saving statistics in JPG format
CNV=0	← Metric/imperial conversion 0 - disabled, 1 - enabled	[IMG]	
		Folder=./IMG	
ChartType=0	← 0, 1, 2 Chart type	FileName=Stat%_\$	
ChartColor=1	← 0,1 Chart colour	INDEX=001	
ChartLineWidth=1	← Line width	[AUTOSAVE]	← Configuration of the folder for saving "backup" files
ChartMarkerSize=5	← Marker size	AUT=0	
ChartBarWidth=35	← % Bar width	Folder=./AUTOSAVE	
		FileName=Chrono_\$	
CheckBoxBTAuto=0	← BLE connection 0 - manual, 1 - auto	INDEX=001	
FREQ=0			
GATE=0	← Processing data from the pulse counter		
A=0		Label2DisplayFormat=0#	← digit format in the speed field

Form

- 1 → Window for editing and receiving data from the chronograph or from a file. The R button or CTRL+R keyboard shortcut starts the calculation update.
- 2 → Hovering the cursor over a plot point: displays point parameters above the chart. Use LMB (left mouse button) to select a point for editing in window No. 1.
- 3 → Projectile mass in grams or grains.
- 4 → Enter the Bluetooth LE name to establish a connection. Alternatively, use the MAC address or name with the MAC address. The CONNECT button starts the connection..
- 5 → SCAN button: Bluetooth devices will be displayed in the format: name, MAC address, RSSI signal level.
- 6 → Selection of the COM port for connecting the chronograph via USB cable, USB-COM, or Bluetooth Classic.