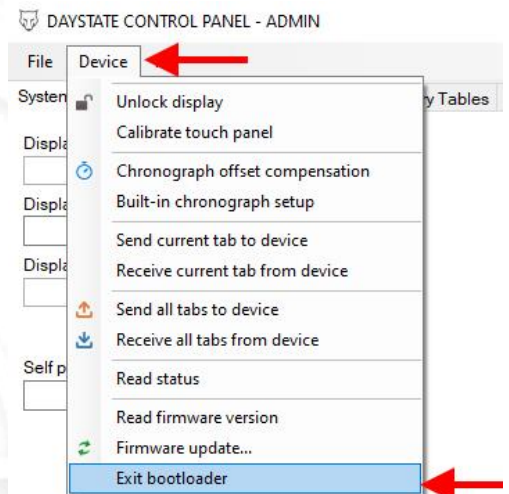


# DAYSTATE DATA TRANSFER DEVICE

## ➤ SERVICE LOADER

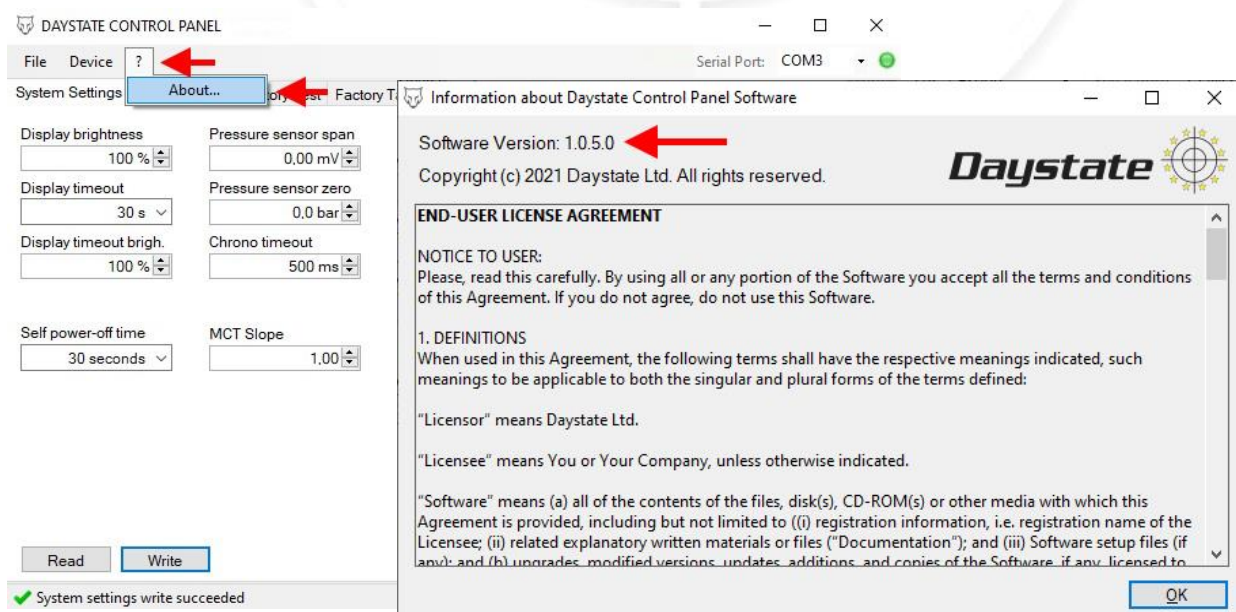


- If the USB cable is connected to the gun **off**, the message "SERVICE LOADER" will appear on the display
  - When the "service loader" mode is active, the only possible action is to load a firmware, no other action will be possible
  - Wait about ten seconds to self exit from "service loader" mode (gun's display back to default home screen) or, from control panel, **"DEVICE"** menu and select EXIT BOOTLOADER



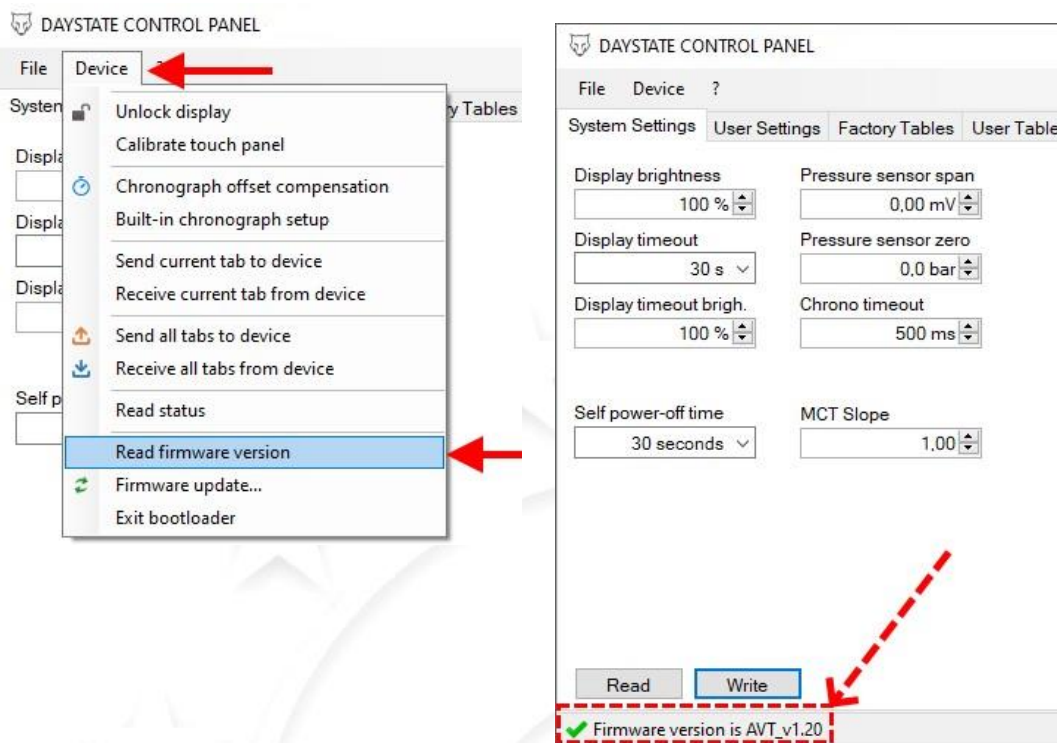
## ➤ check CONTROL PANEL version

- ❖ to check the release you are using, so as to understand if a more updated release is available online
- To identify control panel version, select "?" and then "about", a screen will appear showing the version of the control panel, press "OK" to exit



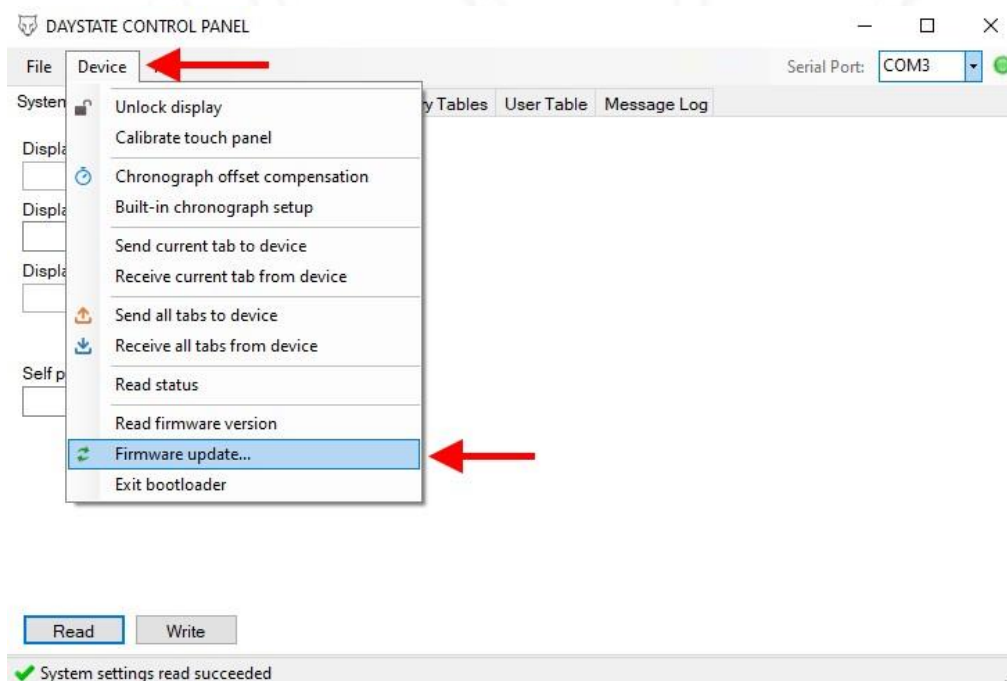
## ➤ check FIRMWARE version

- ❖ to check the version stored on your gun, so as to understand if a more updated version is available online
- To identify **firmware version** , select “**DEVICE**” menu and then “**read firmware version**” , the version loaded on the connected gun will be displayed at the bottom left

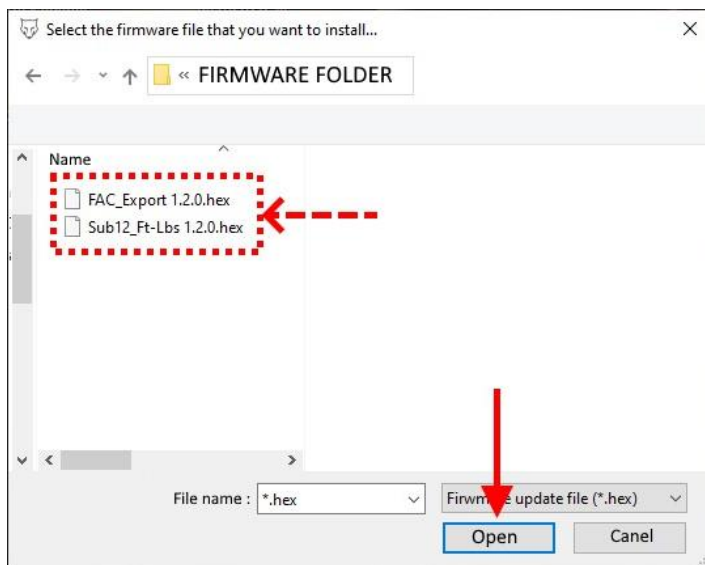


## ➤ loading / update FIRMWARE

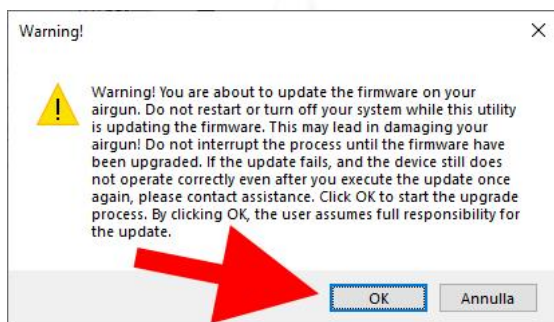
1. Select “**FIRMWARE UPDATE**” from “**DEVICE**” menu



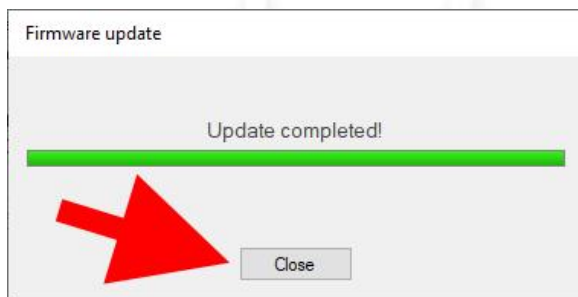
2. Select firmware file **.hex** ( FAC or Sub12 ) from folder > open



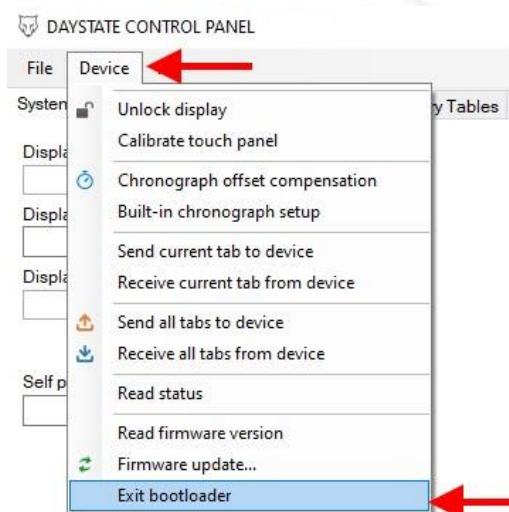
3. A warning message will be displayed , press ok



4. Wait until updated will be completed (about fourty seconds) , then press close

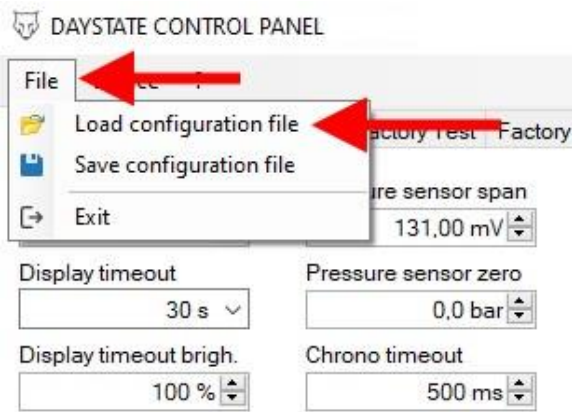


5. Wait about ten seconds to self boot loader exit or from **“DEVICE”** menu , select **“EXIT BOOTLOADER”**

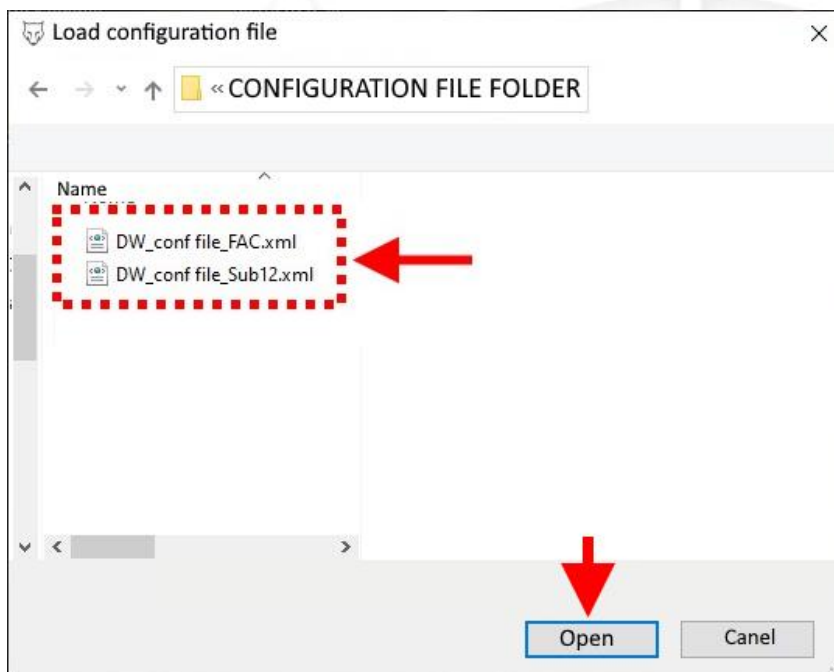


## ➤ loading CONFIGURATION FILE into the gun

1. From "file" menu , select "Load configuration file" (.xml)



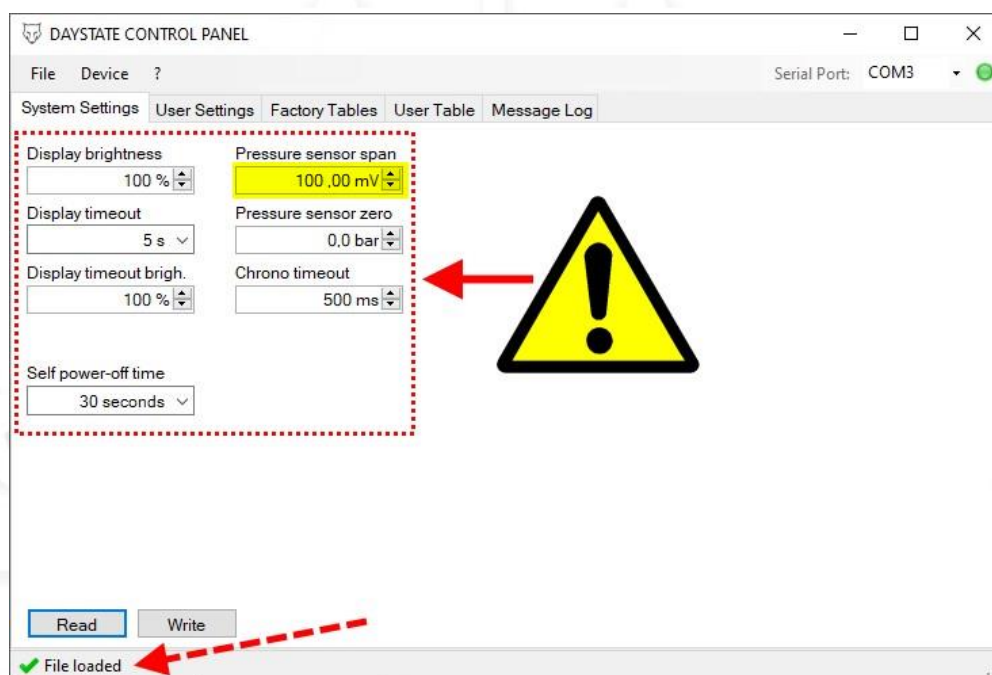
2. Select the configuration file you want to upload (FAC or Sub12) , then press open



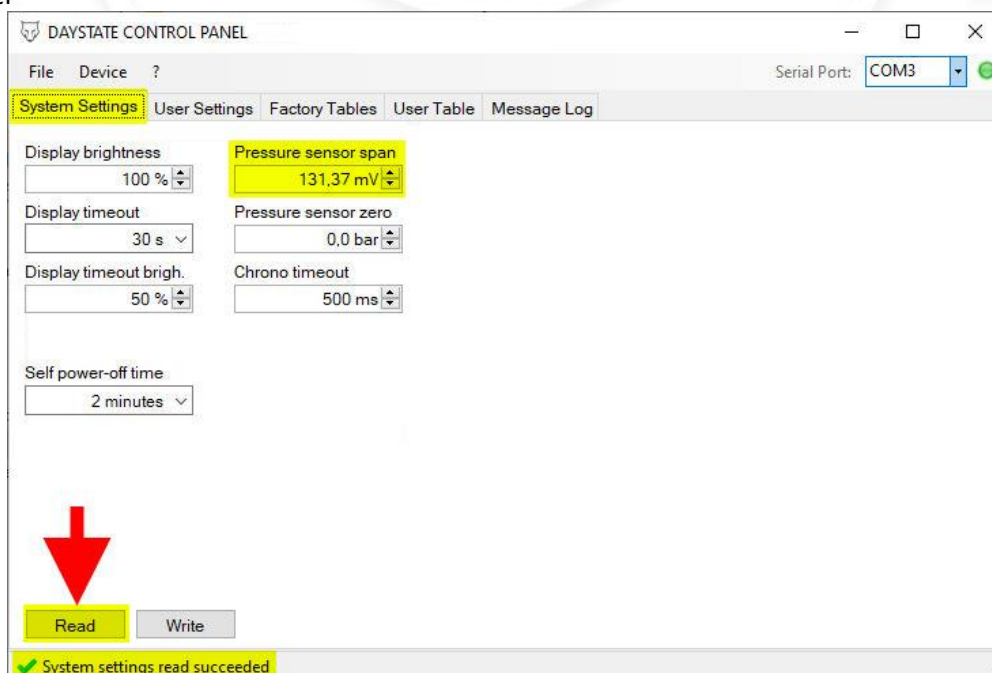
3. "File loaded" message will appear (it means that the file is loaded into the control panel, not in to the gun)

### WARNING !

- When a configuration file is loaded, all values , in **System settings menu** change , and **that may not be correct or compatible with the connected gun .**
- **The most important parameter that must be safeguarded is pressure sensor span because it is the zeroing value of the electronic pressure sensor installed in the gun**
- If you have any problems with this value, see the pressure sensor span chapter
- About pressure sensor **zero** value, MUST be 0, and the chrono timeout MUST be 500
- About display and self power-off time values , they do not compromise the functioning of the gun
- Pay attention to the brightness value, if set to 0, the gun display will appear to be off or a too low value would make the display black making viewing impossible )
- See SYSTEM SETTINGS menu detail chapter for more info

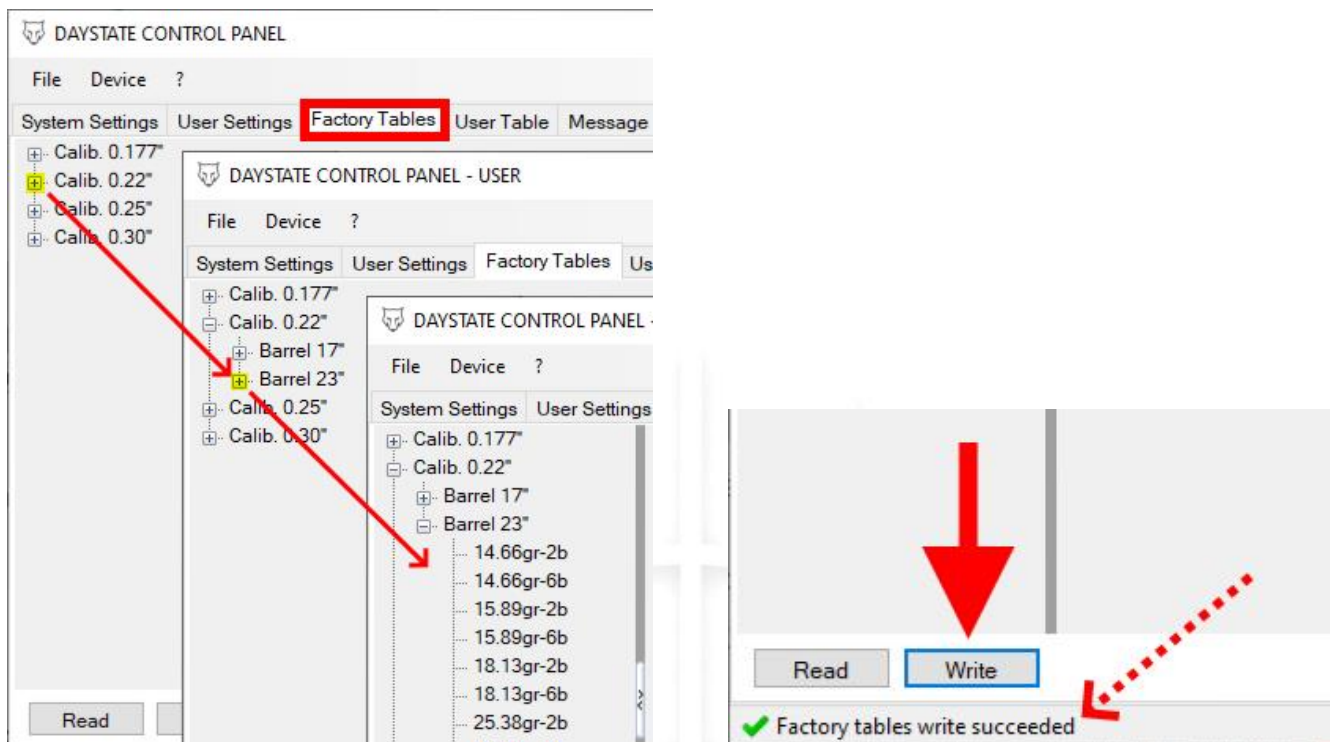


- For the reasons described above, before proceeding with other actions, **stay in the system settings menu** and press **READ** , in this way, the values relating to the system settings menu stored in the gun, will be loaded on the control panel





4. ( **FAC only** ) If you want to load to the gun **only the factory tables** , go to Factory tables menu , select + to expand table's menu if you want see the values) and press **WRITE** , a "succeeded message" will appear



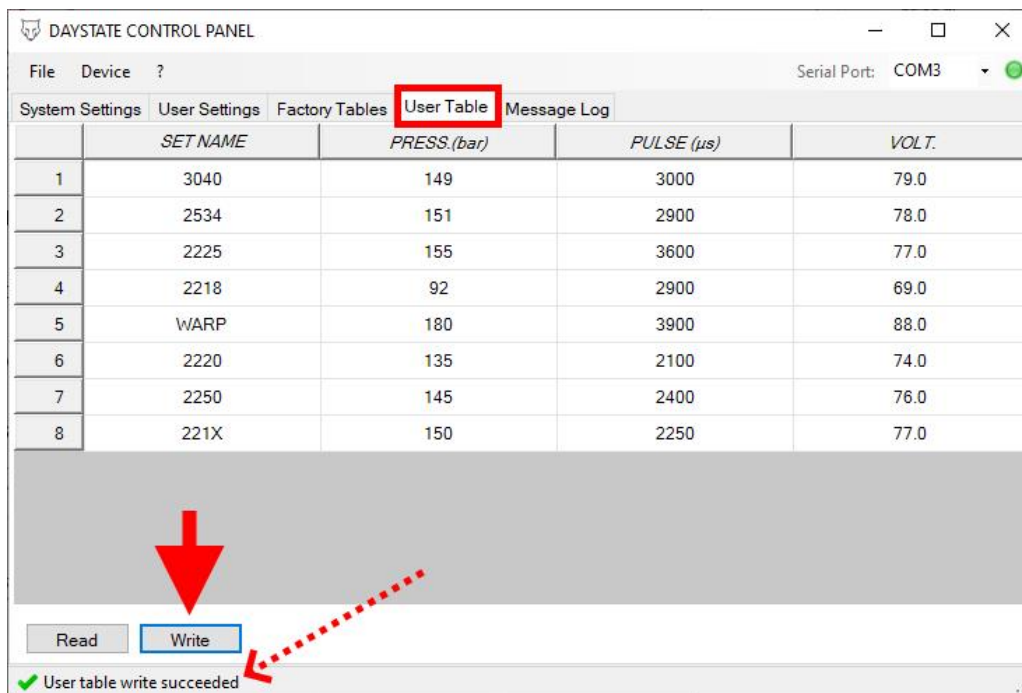
## WARNING !

When you press write, not only the selected/active table is loaded, but **all the tables inside the menu**. This means that :

- If there were already tables inside the gun, they would be completely overwritten
- **If no table sets has been loaded into the control panel (loaded from configuration file or read from the gun) and you press WRITE , you will reset all the tables and therefore they will not be selectable / usable in the gun**
- If you are creating the whole sets of tables, they must all be on the same screen
- If you want insert a new single table, you will first have to load the tables sets (from gun or from conf. file) and then insert it
- See factory tables managing chapter for more detail



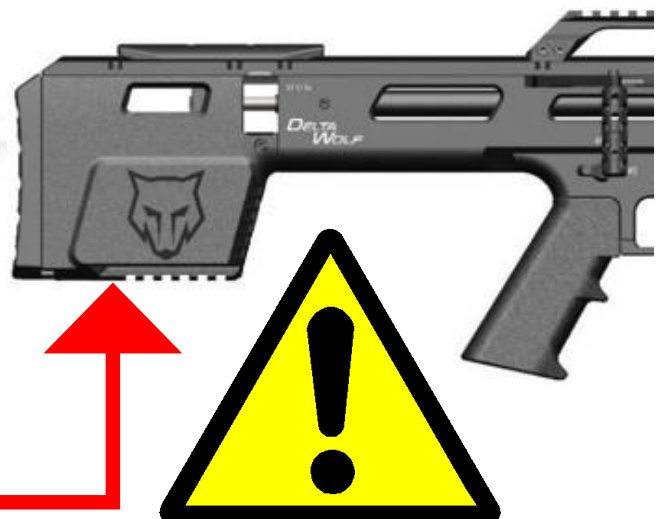
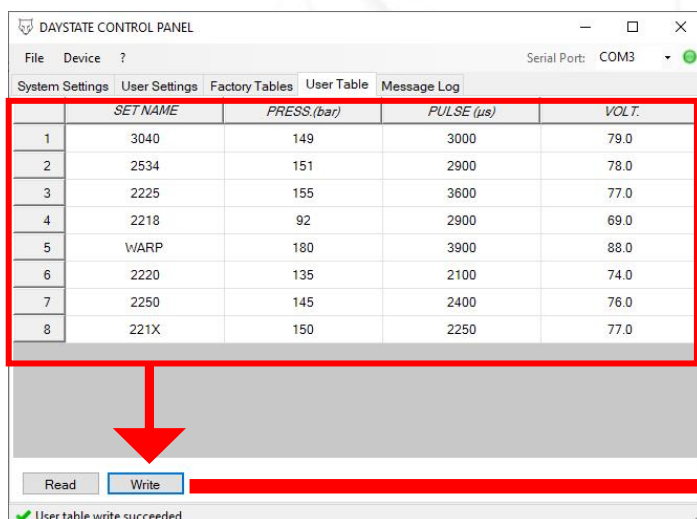
5. **(FAC only)** if you want to load to the gun only the user table , go to User table menu and press **WRITE**, a “succeeded message” will appear



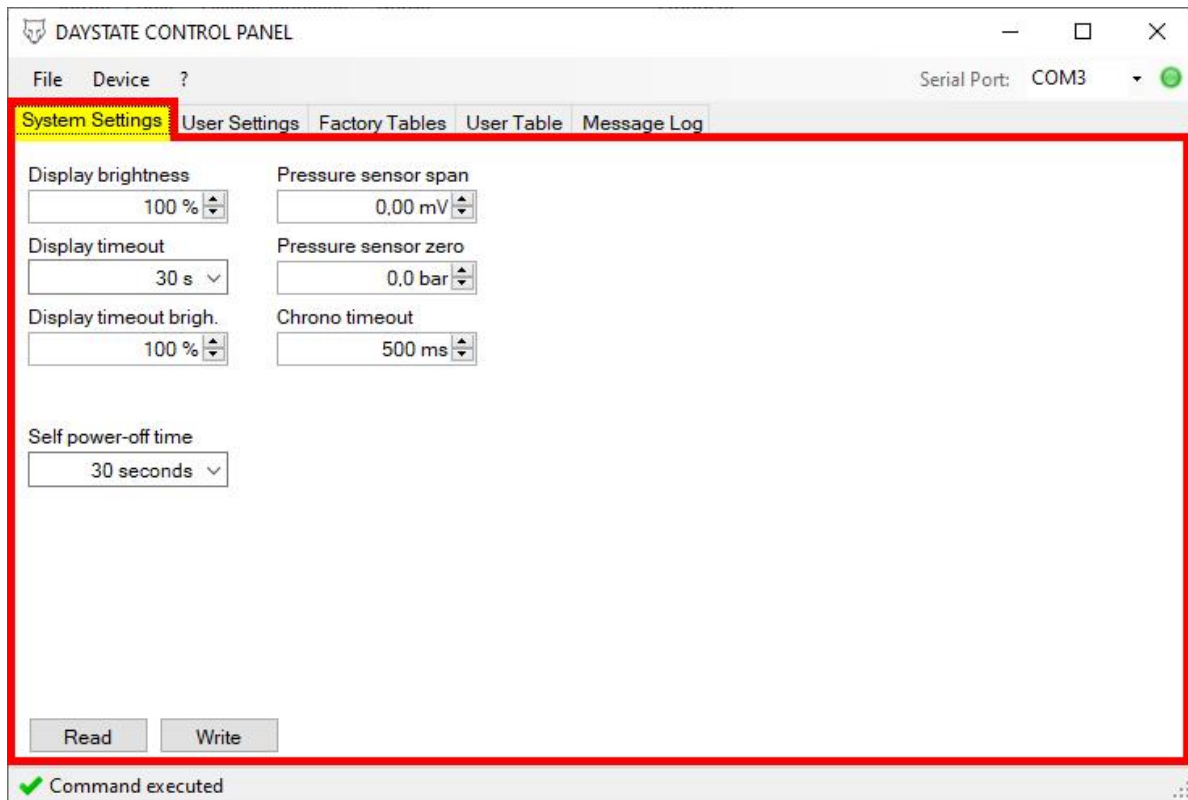
## WARNING !

When you press write **all the user table sets inside the menu will be loaded to the gun**  
This means that :

- If there were already user table inside the gun, they would be completely overwritten
- **If no user table/s has been loaded into the control panel (loaded from configuration file or read from the gun) and you press WRITE , you will delete all the user table and therefore they will not be selectable / usable in the gun**
- If you are creating the whole sets of tables, they must all be on the same screen
- If you want insert a new user table, you will first have to load the user tables sets (from gun or from conf. file) and then insert it
- See user table manging chapter for more detail



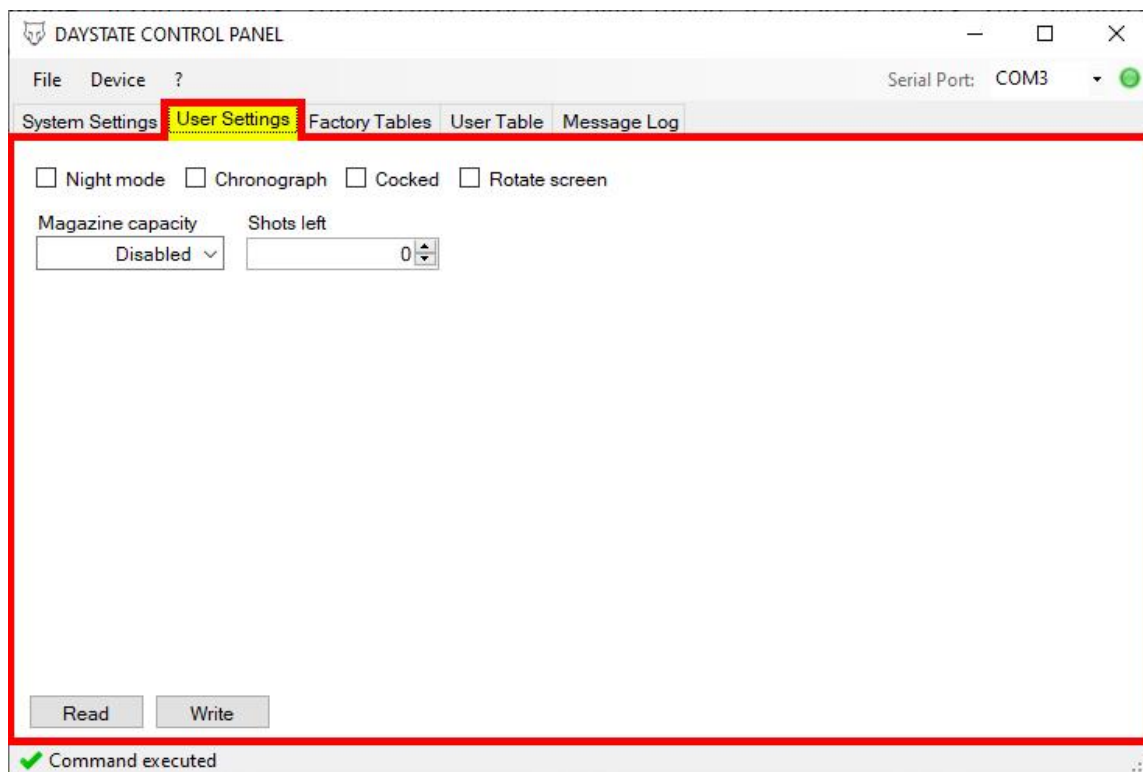
## ➤ SYSTEM SETTING menu detail



- **Display brightness** = brightness value of the display when it is active
  - warning! if the value is 0, nothing will be shown on the display
- **Display timeout** = time value after which the display goes into dim mode
- **Display timeout brightness** = brightness value of the display when goes into dim mode
  - warning! if the value is 0, nothing will be shown on the display
- **Self power-off time** = if the gun is not used, after set time , it goes into sleep mode
- **Pressure sensor span** = offset value of the pressure sensor
  - each pressure sensor has a different offset to detect the correct pressure ( reg. press. in the plenum)
  - if incorrect it could compromise correct pressure reading
- **Pressure sensor zero** = offset value of the pressure sensor
  - MUST be 0
- **Chrono timeout** = time before the chrono transmits the speed detection signal to the GCU
  - default value 500ms
  - necessary to avoid transmission noise during firing
  - if modified it could compromise correct speed detection
- ❖ When you modify/edit a parameter in the control panel menu , press WRITE to load the parameter into the gun, if you do not press write, the parameter will not be loaded into the gun



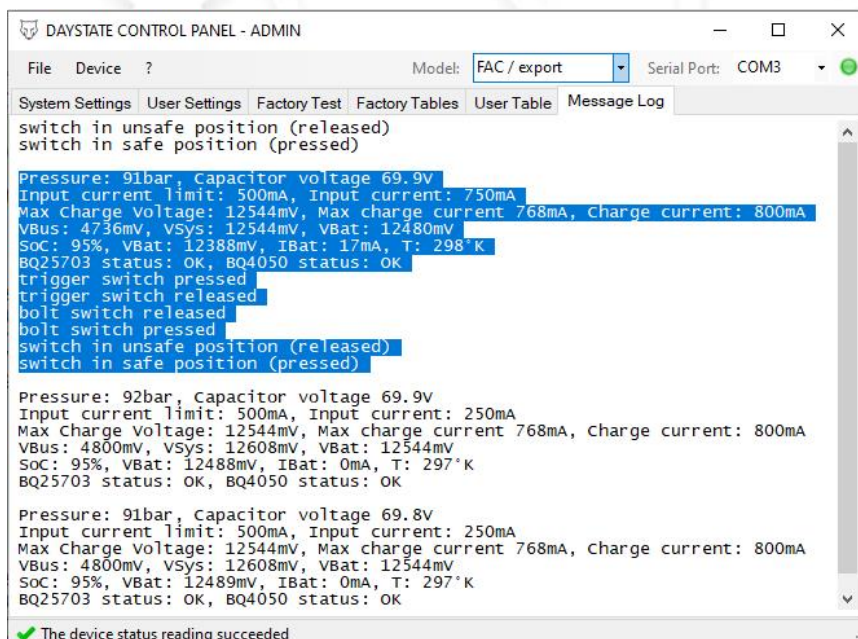
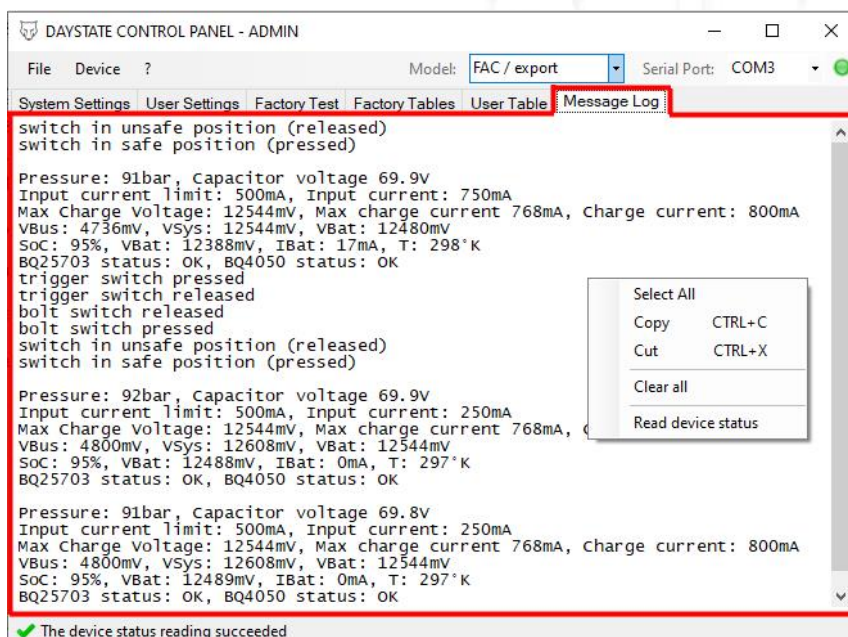
## ➤ USER SETTINGS menu detail



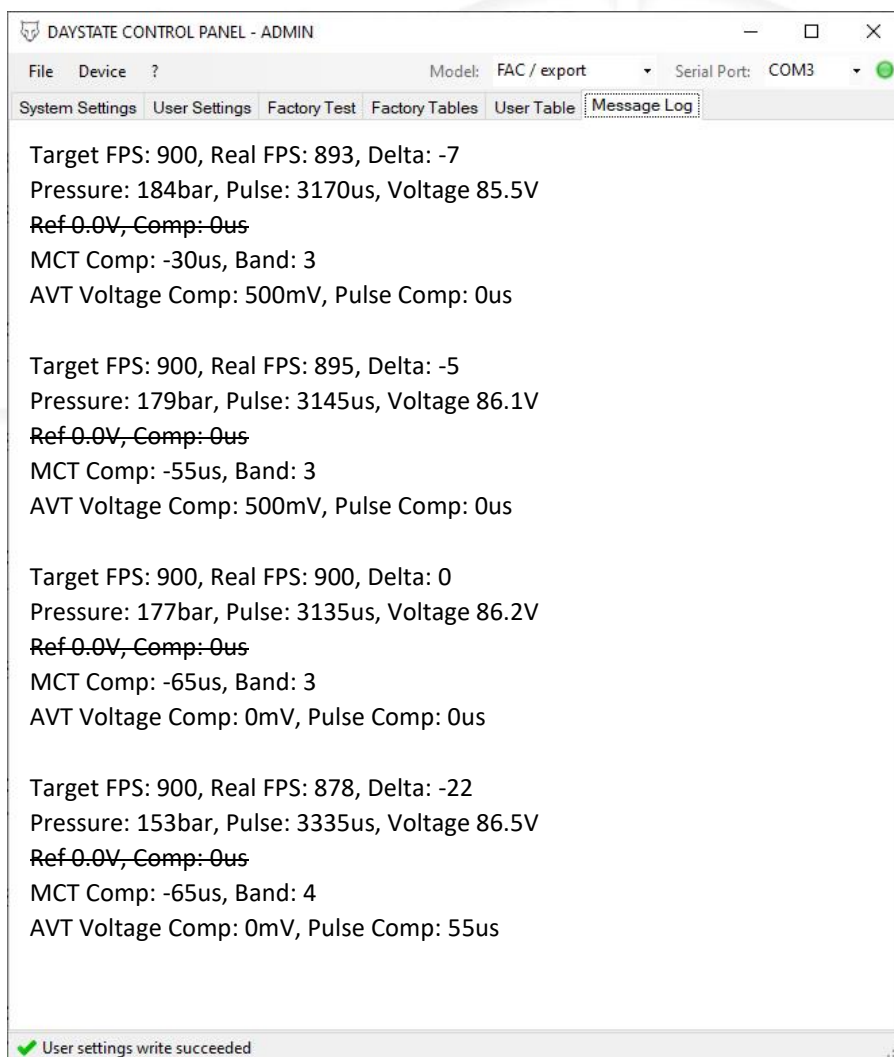
- **Night mode**
    - If square is tick , sets the gun display to night mode
    - If square is un-tick , sets the gun display to day mode
  - **Chronograph**
    - If square is tick , sets the chorno ON
    - If square is un-tick , sets the chorno OFF
  - **Cocked** = do not use, only for custom test
  - **Magazine capacity** =
    - If disabled , the magazine counting function is disabled
    - If a value from those proposed by the drop-down menu is selected, the function is activated
    - The values proposed by the drop-down menu correspond to the capacity of single and double magazine
      - cal. 0.177" =13 shots , double =26 shots
      - cal. 0.22" =11 shots , double =22 shots
      - cal. 0.25" =10 shots , double =20 shots
      - cal. 0.30" =8 shots , double =16 shots
  - **Shots left** = Number of shots left to be fired, the maximum value will correspond to the magazine capacity value set, if value is set to 0, to fire again, the side lever must remain open for about 5 seconds
  - **Rotate screen**
    - If square is un-tick , display stay oriented normally
    - If square is tick , display rotates 180°
      - when you unplug the usb, the display will stay rotated 180 ° only when the screen is locked (useful function for left-handed so that you can view the data on the screen more comfortably)
      - When the screen is unlocked, it will orient itself at 0 °
- ❖ When you modify / edit a parameter in the control panel menu , press WRITE to load the parameter into the gun, if you do not press write, the parameter will not be loaded into the gun

## ➤ MESSAGE LOG menu detail

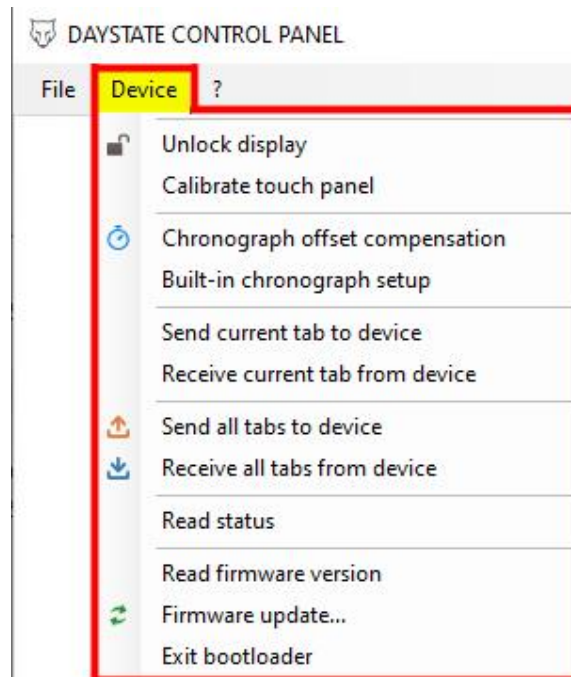
- This menu is used to view in real time what's happening , from an electronic point of view, in the connected gun
- Activating any micro-switch of the gun (trigger/side leve /safety lever) an activation log will be shown, if acting on one of the micro-switches, no log appears, it means that that micro-switch is not working correctly
- Right click on the main screen of menu to manage functions
- **Select all** : to select all the logs reported
- **Cut / copy** : to cut/copy selected logs and then paste them on a text file, useful for sharing information in case you need to do some diagnostics
- **Clear all** : clear all displayed logs, to clear the screen
- **Read device status** : to view all the electrical values, in real time, active into the gun
- By keeping press left mouse , you can select only a part of the logs ,then right click on blue selection to cut/copy



- When shooting using FACTORY TABLES ( compensations MCT/AVT - FAC only) the logs shown the algorithm variation actions :
  - Target FPS (900) = set speed that the gun must reach
  - Real FPS (893) = detected speed of the shot
  - Delta (-7) = speed difference between set and detected, based on this difference either the pulses or the volts will be altered
  - Pressure (184) = regulated pressure value at the time of shot
  - Pulse (3170) – Voltage (85.5) = pulse and voltage values at the time of shot
  - Ref – Comp = no matter
  - MCT Comp (-30)= decrease of dwells related to pressure
  - Band (3) = pressure compensation “position” (between working and optimal pressure)
  - AVT Voltage Comp (500mV) = correction of the voltage value related to the speed difference detected
  - Comp (0us) = correction of the dwell value related to the speed difference detected
- ❖ MCT compensation works in real time, on the shot being fired, while MVT compensation works on the next shot
- ❖ As a rule, when a new target speed is setted , the first 4 hits are all compensated, one by one, while after the fourth shot, compensation occurs only if 2 consecutive shots over target speed are detected



## ➤ DEVICE menu detail

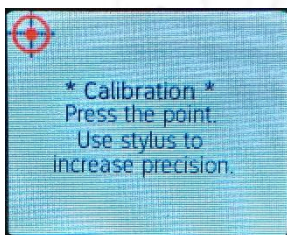


- **Unlock display :**

As long as the gun is connected , it keeps the display unlocked regardless of the position of the safety and/or the side lever, when the gun is disconnected, the screen lock will back to operate correctly

- **Calibrate touch panel :**

Activate the procedure for display touch calibrating , follow the instructions on the display to calibrate



- **Chronograph offset compensation / Built-in chronograph setup :**

see chronograph calibration chapter for detail

- **Send current tab to dev. /Receive current tab from dev. /Send all tabs to dev. /Receive all tabs from dev. :**  
( fac only ) functions that allow the writing / reading of the tables directly without carrying out the more detailed procedure (s), we **do not recommend** the use of these functions.

- **Read status :**

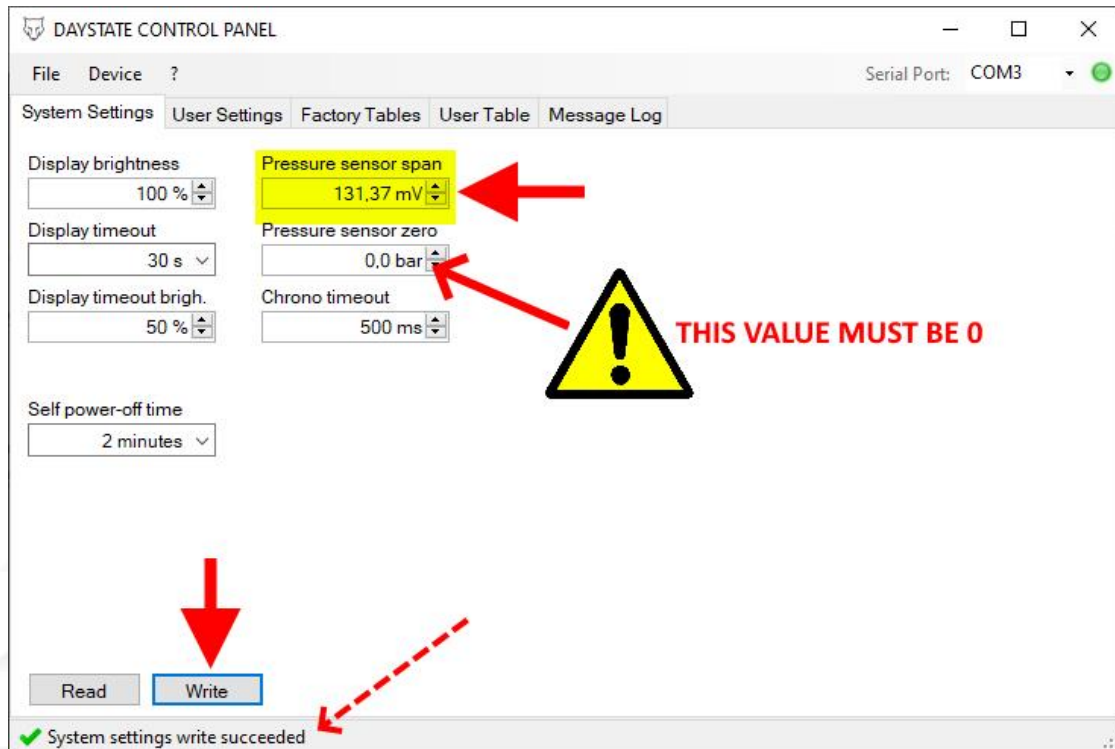
provides a series of data from the connected gun, which are displayed in the message log menu

- **Read firmware version/Firmware update/Exit bootloader. :**

functions described in the previous chapters

## ➤ PRESSURE SENSOR SPAN

- ❖ Each pressure sensor installed on the guns has a different span value and this value is stored in the gun main board
- ❖ In the event that the pressure sensor needs to be replaced, the new pressure sensor, which will be supplied by Daystate, will have a label with the calibration value attached, in this case, when the new pressure sensor is installed in the gun, it will be necessary to report the value indicated on the label in the **pressure sensor span** box, then press WRITE . (**pressure sensor zero value must be leave to 0**)



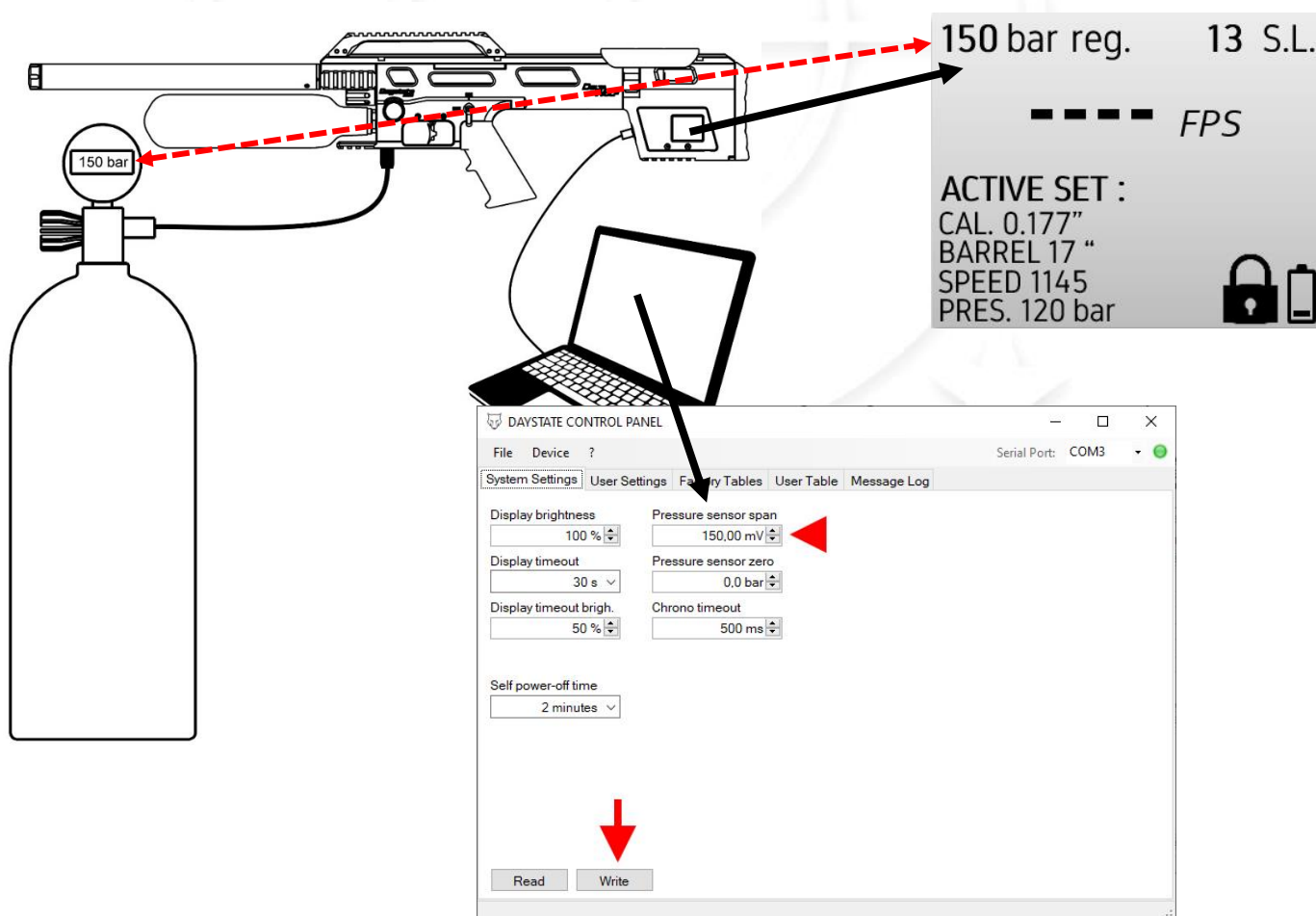


## Pressure sensor manual calibration

1. Make sure that the main pressure ( reading from side pressure gauge ) is lower than 100 bar aprox. , if higher, fire a few empty shots ( **!! using all safety precautions due to a gun !!** ) to lower the pressure
2. Unscrew the adjustment screw of the pressure regulator to ensure that the regulated pressure can reach a high value , about 160/170 Bar



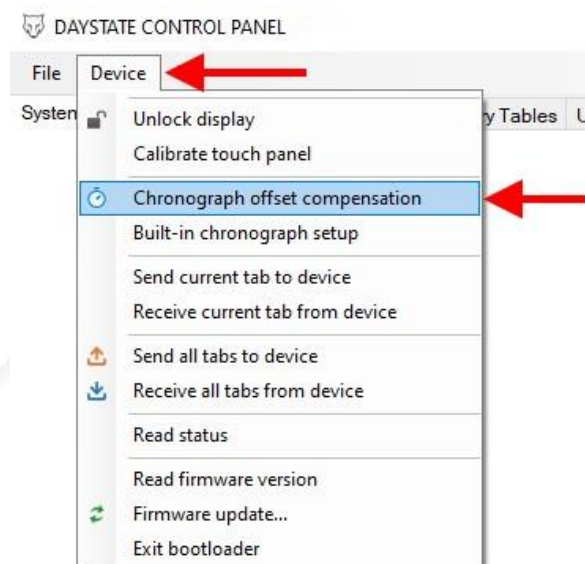
3. Connect the main tank to the gun (main tank must have a digital pressure gauge) and connect the gun to control panel, turn ON the gun
4. Open the valve of the main tank and fill the gun to a random pressure (a range between 100 and 150 bar to be sure that the pressure regulator can manage the pressure and pass it into the plenum), close the valve of the main tank
5. By entering a random value (range of values from about 120 to 150 without decimals .00) in the pressure sensor span box of the control panel , then press WRITE , the pressure value shown on the gun display will be changed , then , continue to enter a value until the pressure shown on the gun display will be the same as the digital pressure gauge of the main tank.



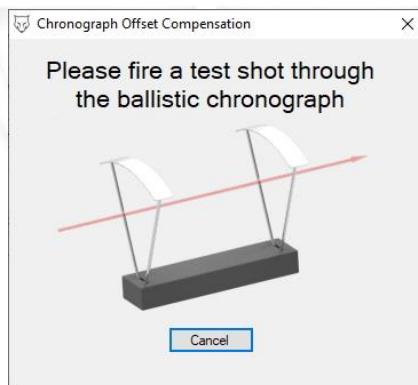
## ➤ CHRONO CALIBRATION

- ❖ To run chrono offset calibration procedure an external reference chrono is necessary
- ❖ the gun must be prepared to shot, so :
  - safety selector in safe position, side lever / bolt open, check that no pellets have been inserted
  - position the gun safely and in a safe direction
  - position the external chrono correctly and make it operational in order to detect the speed
  - connect gun , by usb DTD, to the pc with control panel open
  - insert the pellet into the barrel (of the appropriate caliber for the barrel, any weight is ok)

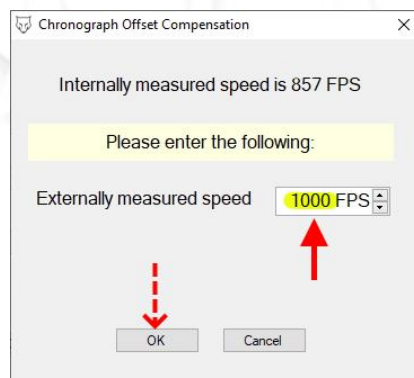
1. From “ **device** ” menu of control panel, select “**Chronograph offset compensation**”



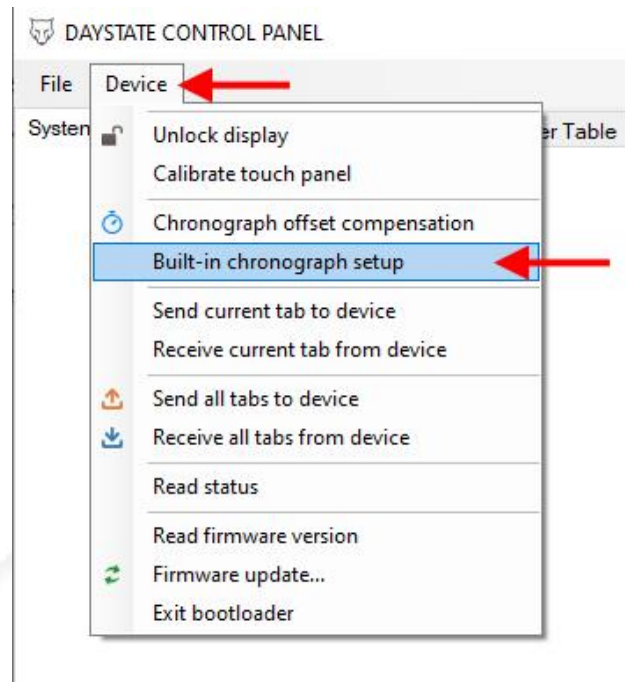
2. Window pops up, close side lever/bolt , safety in fire position then fire a shot (any speed/caliber/barrel length setting are ok , as long as the pellet reaches a minimum detection speed)



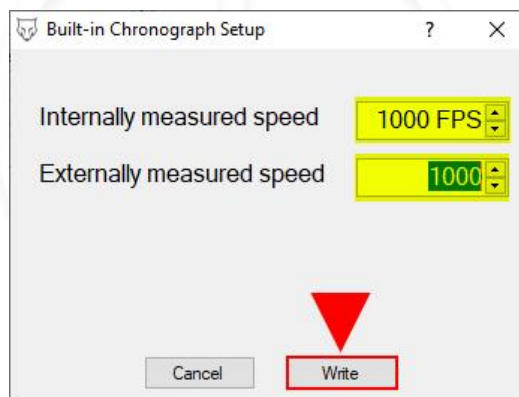
3. Another window pops up, insert FPS value detect from external chrono , then press “**OK**”



4. Fire a few shots to verify that the chrono calibration has been successful, i.e. that the speed detected by the gun's chrono corresponds to the speed detect from external chrono ( $\pm 3$  fps)
5. If the detected speed does not match:
  - 5.1. From “**device**” menu of control panel, select “**built-in chronograph setup**”



- 5.2. Window pops up, enter value 1000 in both boxes , then press “write” button



- 5.3. Repeat the actions from point 1 to point 4
6. If, even after carrying out the actions described above, the detected speeds do not match
  - A. The clear tube inside the chrono module need to be cleaned
  - B. It is likely that the chrono unit needs to be replaced

## ➤ **FACTORY TABLES ( FAC only )**

- ❖ When factory tables are used to shot ,gun will apply automatic compensation to attempt to keep the shots speed always at the same setted speed
- ❖ The compensation is managed by an algorithm that will take into account the pressure at the moment of the shot and the speed detected
- ❖ **Pressures values/compensation** ( variation of pulse lenght value related to the pressure ) what they are, what they are for:

In order to optimize the shot count but at the same time **avoid having to adjust too frequently** the pressure regulator, a working pressure is set to allow to cover a full speed range of that specific caliber and weight .

This solution is necessary in order to provide the customer with a gun ready for any purpose (hunting - target ..)

However, thanks to the potential that this "smart"gun offers, each customer can create tables for their specific use.

- Example of “any purpose” table ( the data shown in the table are for example purposes only ) :

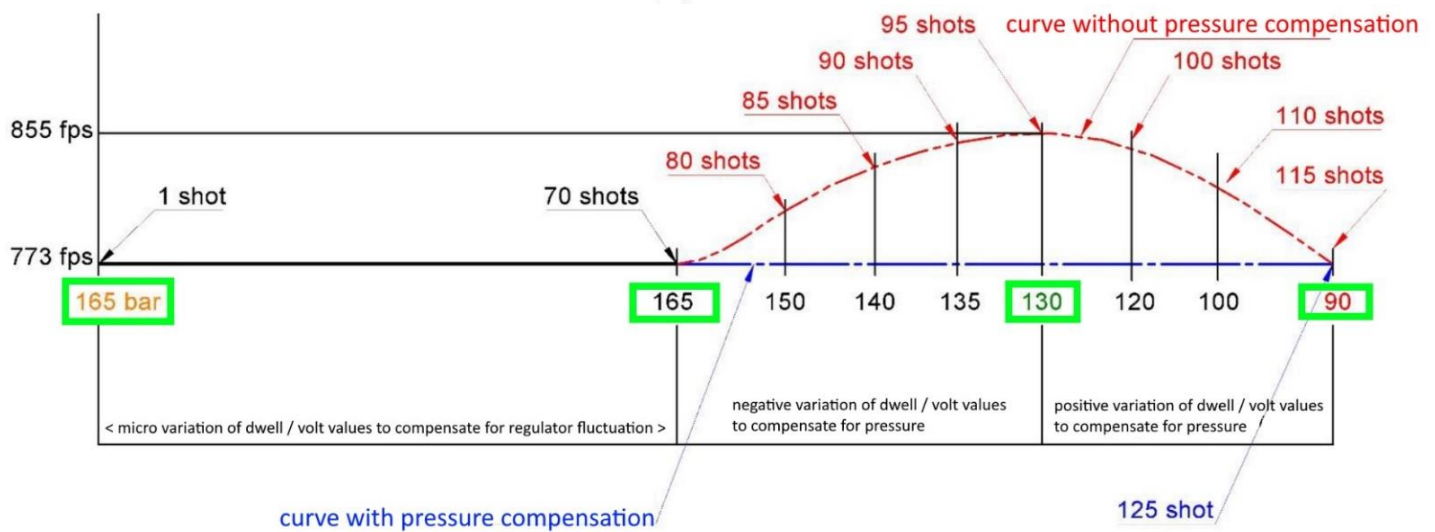
FPS	WORK.PR ( bar )	OPT.PR ( bar )	MIN.PR. ( bar )	PULSE	VOLT.
640	195	120	70	2530	70,5
660	195	121	70	2700	70,5
680	195	124	79	2750	71
700	195	127	83	2800	72
720	195	132	89	2850	73
740	195	138	95	2900	74
760	195	139	104	2980	75
780	195	143	110	3020	76
800	195	145	120	3130	77
820	195	148	130	3180	78
840	195	155	137	3350	78,5
860	195	158	148	3500	79,5
870	195	161	154	3520	80
880	195	178	163	3500	81
890	195	182	173	3500	82
900	195	188	180	3550	83
910	195	193	190	3850	83
920	195	194	192	3850	84
930	195	194	192	3880	85
940	195	194	193	3850	88

- example of “customer ” table ( the data shown in the table are for example purposes only ) :

FPS	WORK.PR ( bar )	OPT.PR ( bar )	MIN.PR. ( bar )	PULSE	VOLT.
640	140	120	70	2530	70,5
660	140	121	70	2700	70,5
680	140	124	79	2750	71
700	140	127	83	2800	72
720	140	132	89	2850	73
740	140	138	95	2900	74
760	140	139	104	2980	75
780	170	143	110	3020	76
800	170	145	120	3130	77
820	170	148	130	3180	78
840	170	155	137	3350	78,5
860	170	158	148	3500	79,5
870	170	161	154	3520	80
880	195	178	163	3500	81
890	195	182	173	3500	82
900	195	188	180	3550	83
910	195	193	190	3850	83
920	195	194	192	3850	84
930	195	194	192	3880	85
940	195	194	193	3850	88

- **WORKING PRESSURE** (165 bar show below)
  - Is pressure value that is proposed/displayed on the gun
- **OPTIMAL PRESSURE** (130 bar show below)
  - It is the pressure which, with the dwell/volt values unchanged, generates the highest speed
  - Logically if are firing at high speed this pressure will be equal to the working pressure, the more fire at lower speeds, the lower this pressure will be
- **MINIMUM PRESSURE** (90 bar show below)
  - Is the lower pressure flashing alert that is displayed on the gun
  - It is the minimum pressure beyond which the speed drops (with the dwell/volt values unchanged)
  - Logically if you are firing at high speed this pressure will be equal to the working/optimal pressure, the more shots fired at a lower speed , the lower this pressure will be

( the data shown below are for example purposes only )



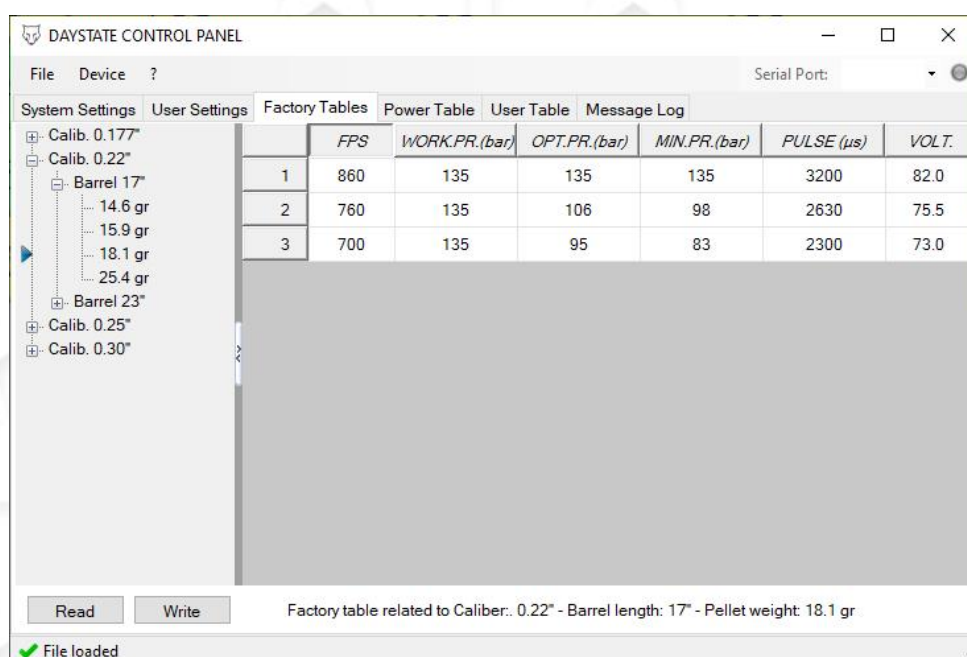
➤ **Speed compensation** (variation of pulse length or voltage value related to the detected speed)

- If the detected speed is 4 fps higher or lower than the target speed : no compensation
- If the detected speed is 100 fps higher or lower than the target speed : no compensation
- If the detected speed is from 5 to 99 fps higher or lower than the target speed : value compensation



## ➤ Machine learning

- ❖ When factory tables are used to shot , if will be select a speed , for the first time , included in the speed range stored in the table, but not written in the table, the gun will set automatically and , within a few shots, it will reach the set speed.
- ❖ When the gun reaches the set speed, and keep it stable for at least 3 consecutive shots ( $\pm 4$ fps), a new line will be automatically written in the table, where the optimal parameters , to reach that specific speed, will be stored. The new lines , created by machine learning , will be marked with a “target” icon.
- ❖ This means that, when that speed is called up, the gun will set with already optimized parameters to reach the designated speed.
- ❖ In order to optimize the machine learning function, at least 3 settings must be set, that is; maximum speed, average speed, minimum speed
- ❖ Example of “factory ” table ( the data shown in the table are for example purposes only ) :

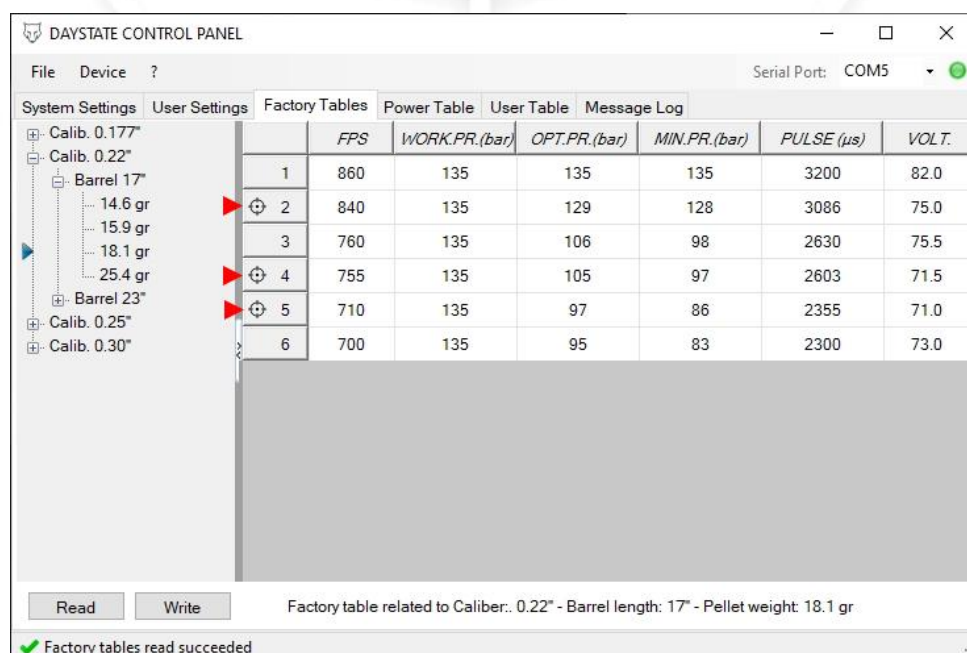


	FPS	WORK.PR.(bar)	OPT.PR.(bar)	MIN.PR.(bar)	PULSE (μs)	VOLT.
1	860	135	135	135	3200	82.0
2	760	135	106	98	2630	75.5
3	700	135	95	83	2300	73.0

Factory table related to Caliber:. 0.22\" - Barrel length: 17\" - Pellet weight: 18.1 gr

File loaded

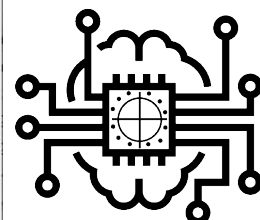
- ❖ Example of table after machine learning ( the data shown in the table are for example purposes only ) :



	FPS	WORK.PR.(bar)	OPT.PR.(bar)	MIN.PR.(bar)	PULSE (μs)	VOLT.
1	860	135	135	135	3200	82.0
2	840	135	129	128	3086	75.0
3	760	135	106	98	2630	75.5
4	755	135	105	97	2603	71.5
5	710	135	97	86	2355	71.0
6	700	135	95	83	2300	73.0

Factory table related to Caliber:. 0.22\" - Barrel length: 17\" - Pellet weight: 18.1 gr

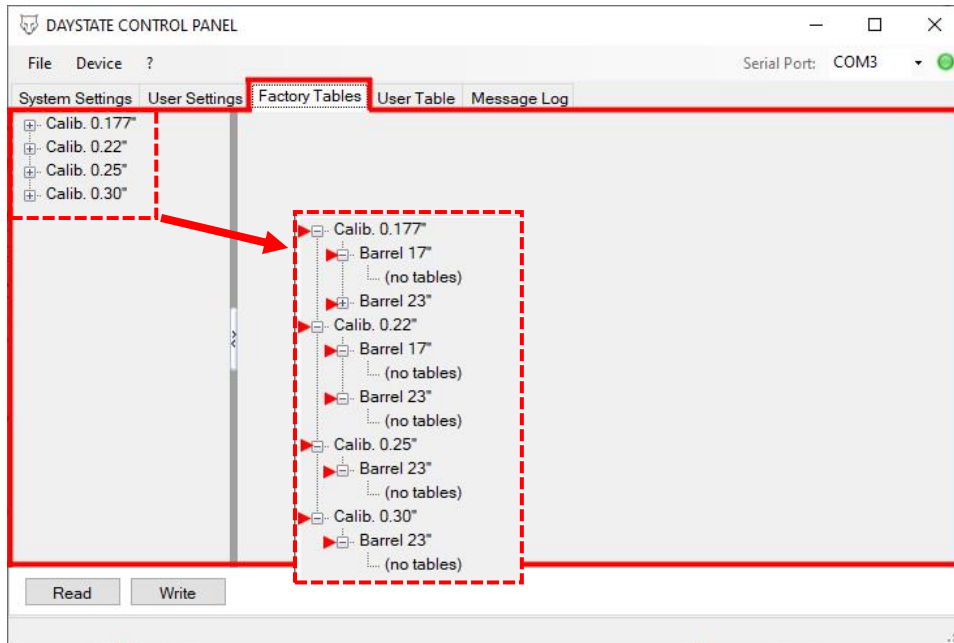
Factory tables read succeeded



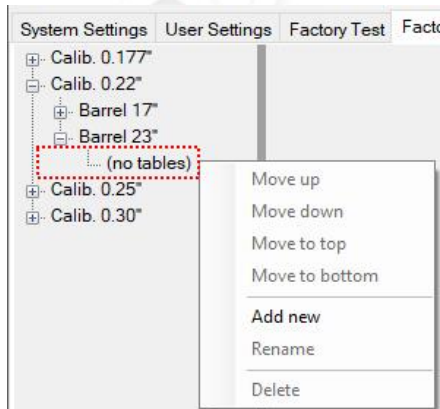
## ➤ How to create ,modify and managing a table or tables sets

### • Create a table

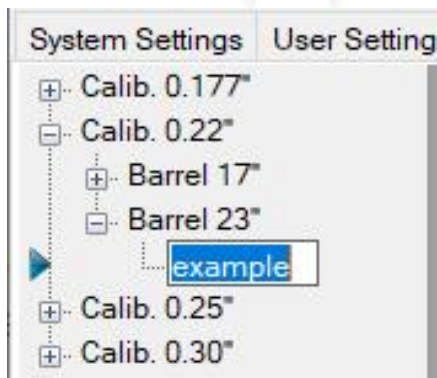
- Within this menu, will find already sets designations (caliber - barrel length)
- Press + to expand, - to reduce



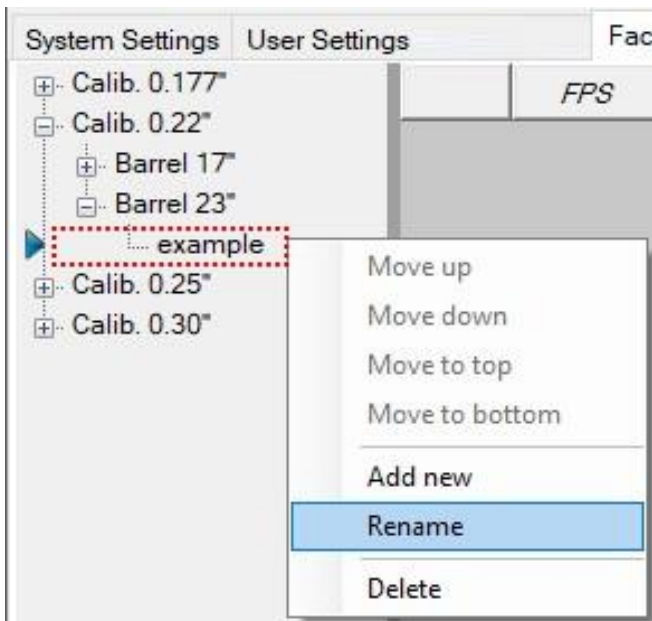
- Place the mouse in the area near the (no tables) ,then right click and select add new
  - Logically will have to create the table of the specific caliber and barrel length within the corresponding preset set



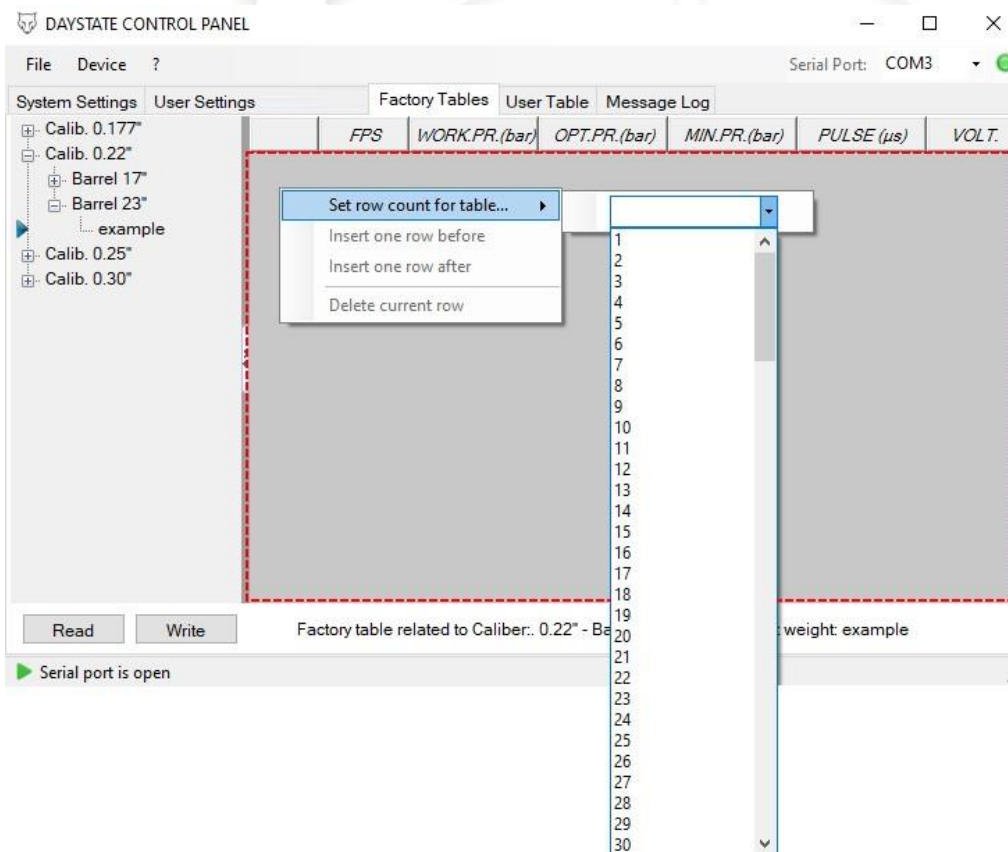
- type a name for the table, this name will be displayed on the gun, usually the weight of the pellet is entered



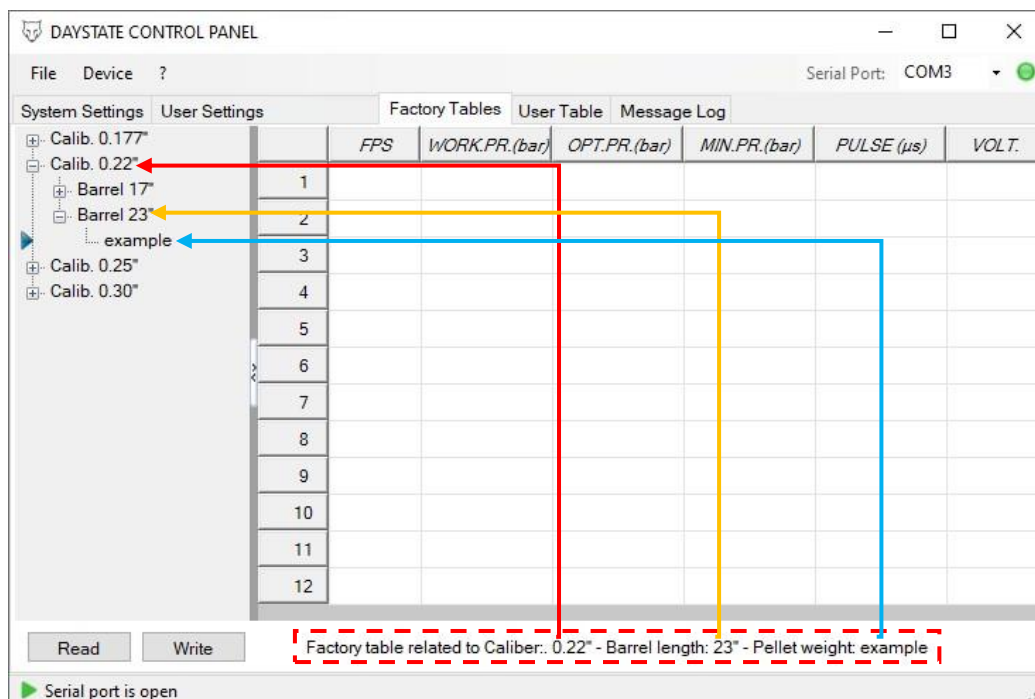
- If you want delete or rename the table , place the mouse in the area near to the created table,then right click



- In the grey area , right click and set number of row from the drop-down menu

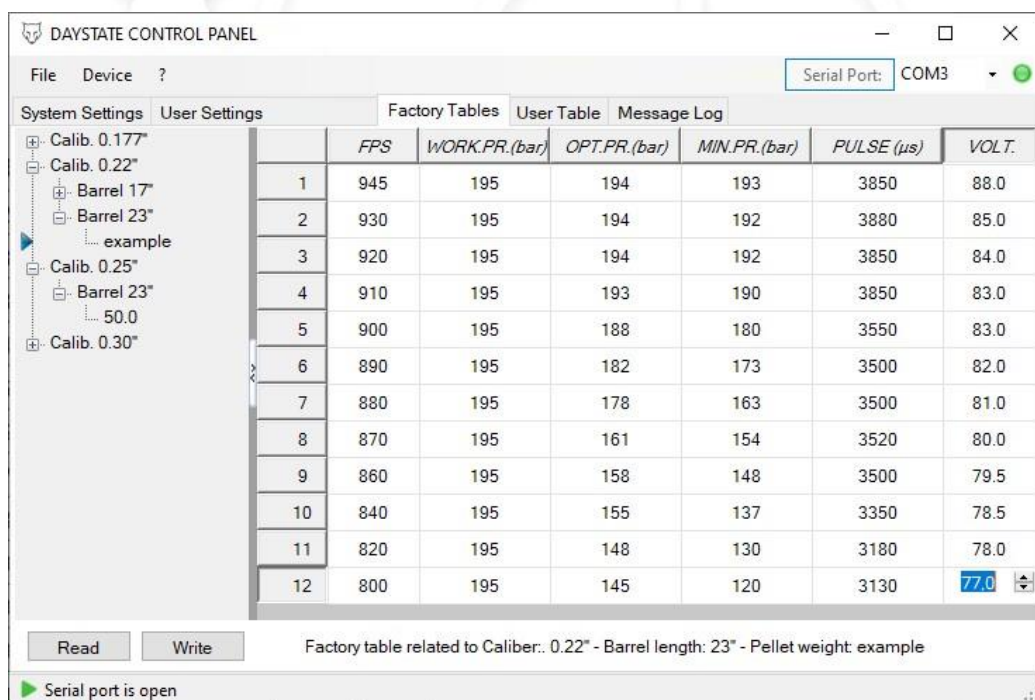


- An empty table will appear
- Below you can see the active table you are working on



- Enter the values starting with the highest speed
- Press enter at each entered value

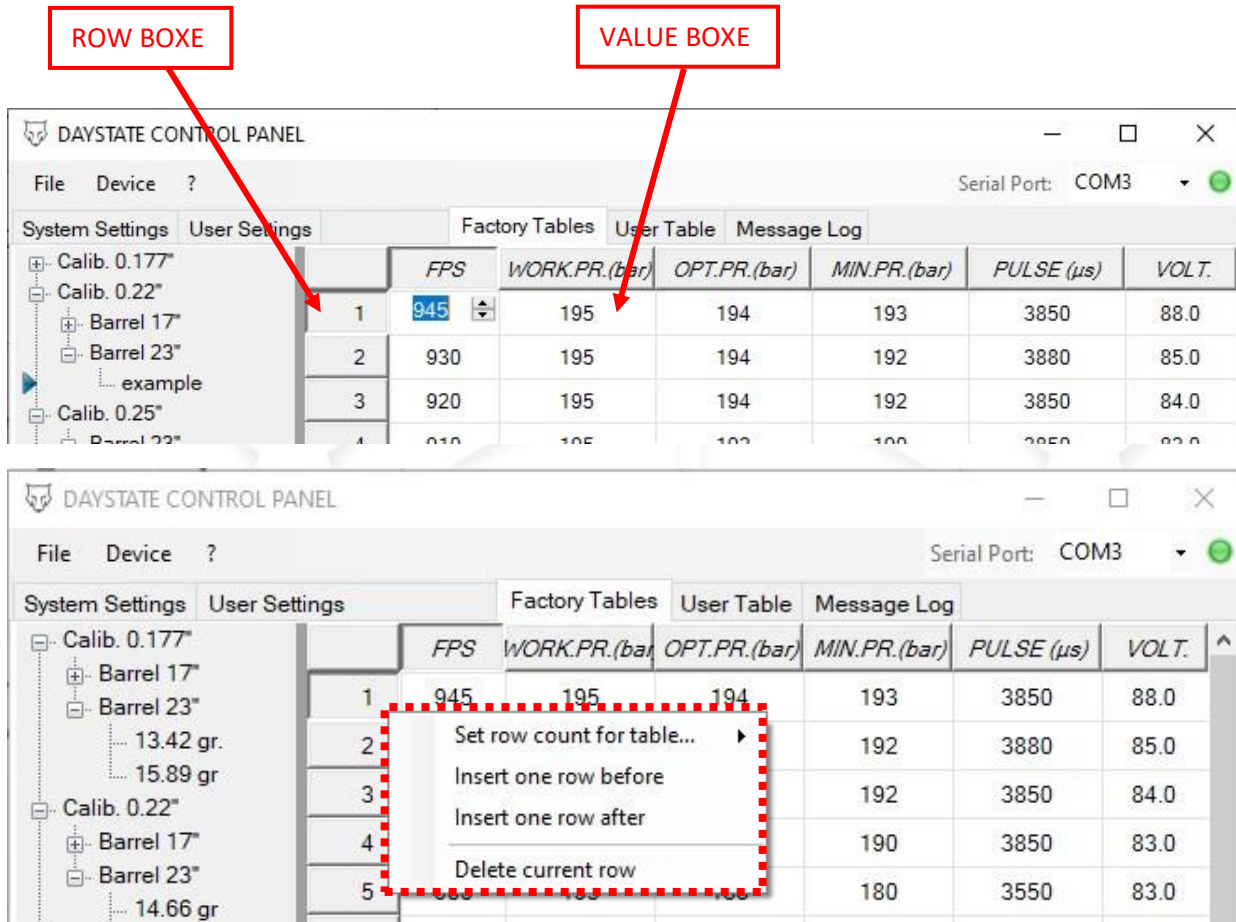
( the data shown in the table are for example purposes only )





- **To modify the table and / or the values entered**

- To modify value
  - Click on the value you want to change, the value can simply be changed , press enter to confirm value
- To add or remove row :
  - Click in one of the value boxes of the row you want to modify , the number of the selected row is highlighted graphically
  - Right click on highlighted row boxe , a menu with options will appear



**ROW BOXE**

**VALUE BOXE**

DAYSTATE CONTROL PANEL

File Device ? Serial Port: COM3

System Settings User Settings Factory Tables User Table Message Log

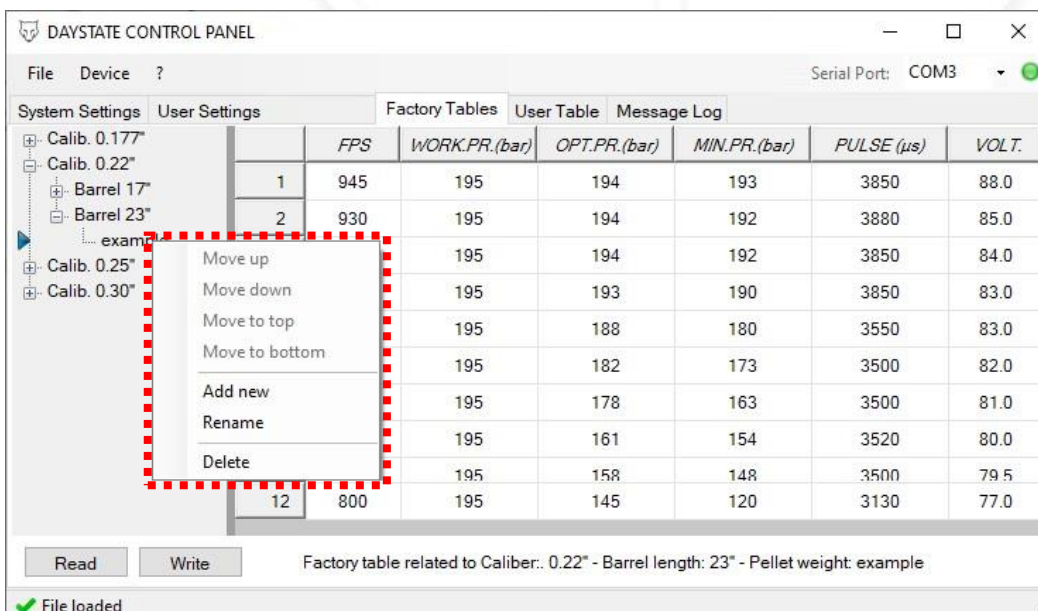
		FPS	WORK.PR.(bar)	OPT.PR.(bar)	MIN.PR.(bar)	PULSE (µs)	VOLT.
Calib. 0.177"	1	945	195	194	193	3850	88.0
Calib. 0.22"	2	930	195	194	192	3880	85.0
Barrel 17"	3	920	195	194	192	3850	84.0
Barrel 23"	4	910	195	193	190	3850	83.0

Context menu options:

- Set row count for table...
- Insert one row before
- Insert one row after
- Delete current row

- **to delete or rename table**

- Right click on the table you want to delete or rename , a menu with options will appear



DAYSTATE CONTROL PANEL

File Device ? Serial Port: COM3

System Settings User Settings Factory Tables User Table Message Log

		FPS	WORK.PR.(bar)	OPT.PR.(bar)	MIN.PR.(bar)	PULSE (µs)	VOLT.
Calib. 0.177"	1	945	195	194	193	3850	88.0
Calib. 0.22"	2	930	195	194	192	3880	85.0
Barrel 17"	3	920	195	194	192	3850	84.0
Barrel 23"	4	910	195	193	190	3850	83.0
example	5	900	188	180	180	3550	83.0
Calib. 0.25"	6	890	182	173	173	3500	82.0
Calib. 0.30"	7	880	178	163	163	3500	81.0
	8	870	161	154	154	3520	80.0
	9	860	158	148	148	3500	79.5
	10	850	145	120	120	3130	77.0

Context menu options:

- Move up
- Move down
- Move to top
- Move to bottom
- Add new
- Rename
- Delete

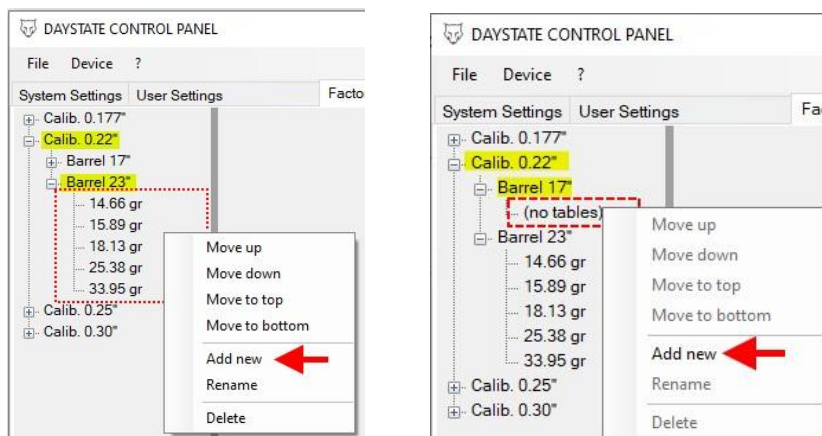
Read Write Factory table related to Caliber.: 0.22" - Barrel length: 23" - Pellet weight: example

File loaded



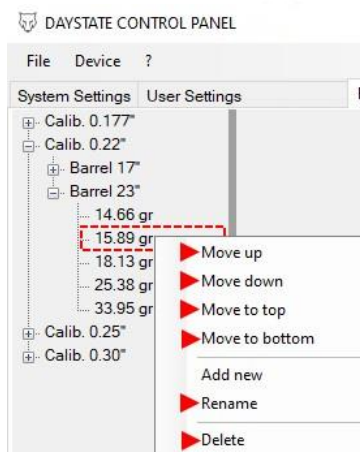
- **To add a new table in already tables set opened**

- Right click on one of the tables already done within the barrel length and caliber set of the table you want to add, then add new



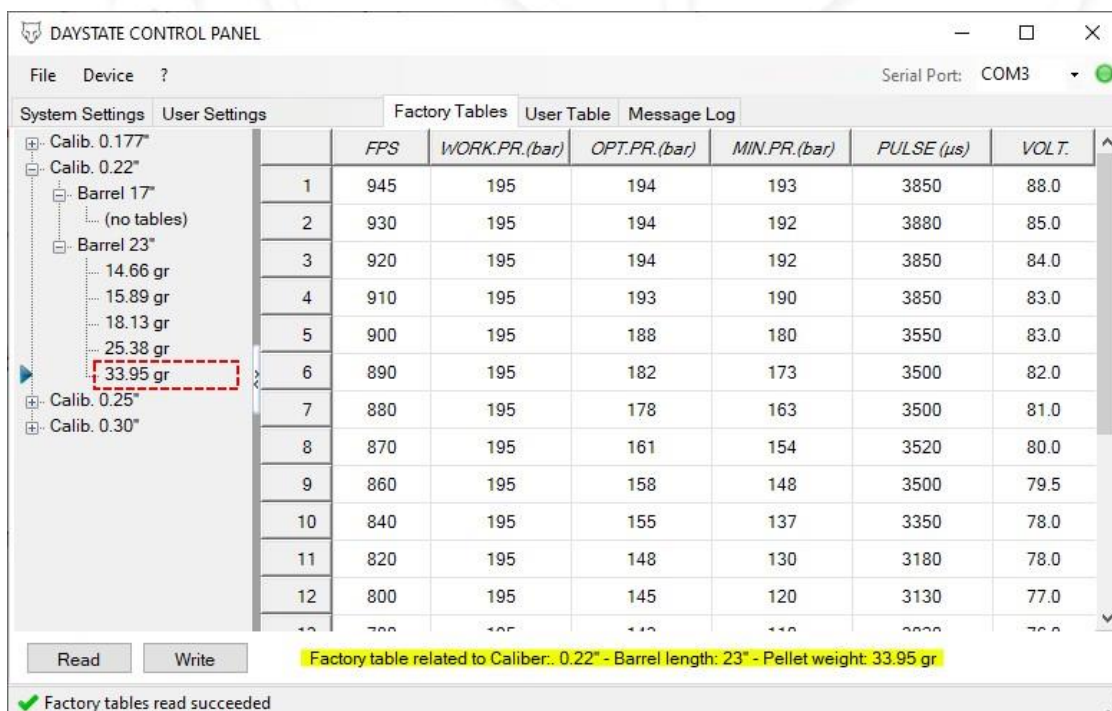
- **To managing an already done table**

- Right click on the table already done that you want managing , then select one of the options



- **To modify an already done table**

- Left click on the table already done that you want modify , all the values relating to the table will be shown and can be modified

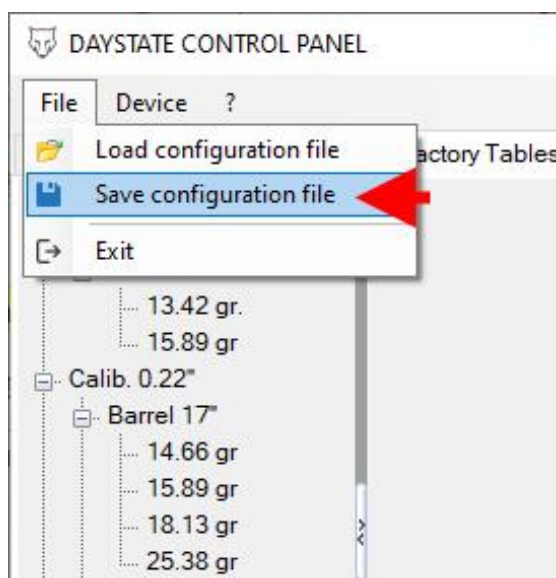


The screenshot shows the 'DAYSTATE CONTROL PANEL' with the 'Factory Tables' tab selected. The table displays data for various calibers and barrel lengths. The '33.95 gr' entry under 'Barrel 23\*' is highlighted with a red dashed box. Below the table, a status bar indicates 'Factory table related to Caliber: 0.22" - Barrel length: 23" - Pellet weight: 33.95 gr'.

	FPS	WORK.PR.(bar)	OPT.PR.(bar)	MIN.PR.(bar)	PULSE (μs)	VOLT.
1	945	195	194	193	3850	88.0
2	930	195	194	192	3880	85.0
3	920	195	194	192	3850	84.0
4	910	195	193	190	3850	83.0
5	900	195	188	180	3550	83.0
6	890	195	182	173	3500	82.0
7	880	195	178	163	3500	81.0
8	870	195	161	154	3520	80.0
9	860	195	158	148	3500	79.5
10	840	195	155	137	3350	78.0
11	820	195	148	130	3180	78.0
12	800	195	145	120	3130	77.0

- To save your tables sets
  - file > save configuration file

**\* in the configuration file, all the data present in the control panel , in all menus , are saved.**



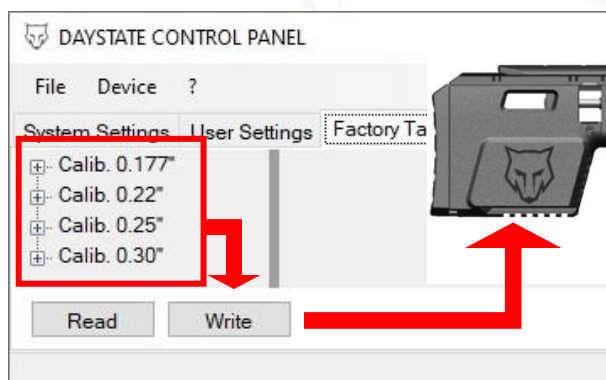
- to load tables sets to the gun
  - press write to load the tables sets in the gun

## WARNING !

When you press write, not only the selected/active table is loaded, but **all the tables inside the menu.**

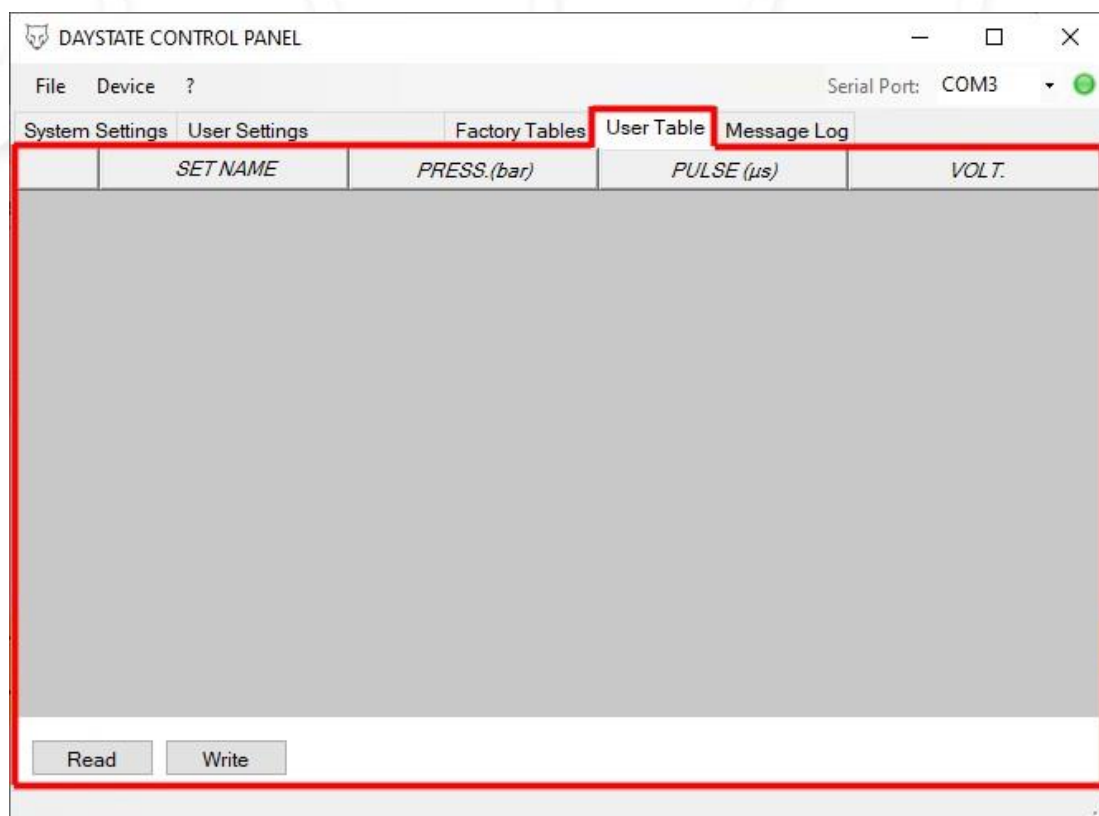
This means that :

- If there were already tables inside the gun, they would be completely overwritten
- **If no table sets has been loaded into the control panel (loaded from configuration file or read from the gun) and you press WRITE , you will reset all the tables and therefore they will not be selectable / usable in the gun**
- If you are creating the whole sets of tables, they must all be on the same screen
- If you want insert a new single table, you will first have to load the tables sets (from gun or from conf. file) and then insert it

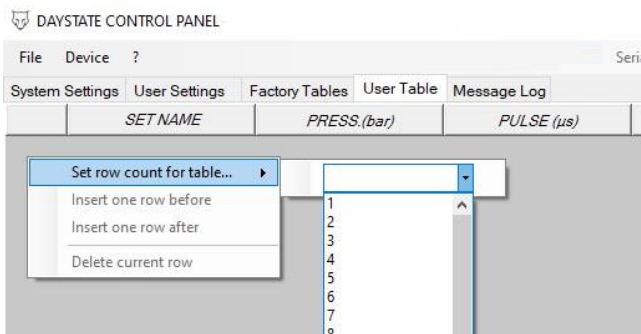


## ➤ USER TABLE ( FAC only )

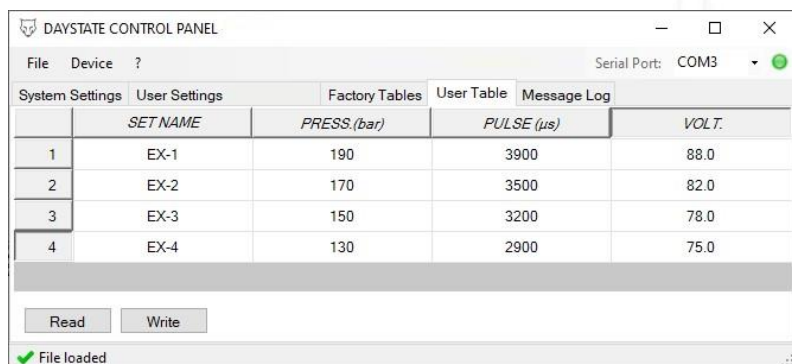
- ❖ This menu can be managed in different ways, the table can be loaded from the configuration file or from the connected gun, can be made, deleted or modified both from the control panel or directly to the gun into "ADVANCED SHOT SETTING" menu
- ❖ This function gives the user the opportunity to set the gun at will, for any reason (new types of ammunition that are not managed correctly by the factory table /compensation or to find better/different value to redo or modify a tables sets)
- ❖ **when using ADVANCED SHOT SETTING, no value compensation is applied**
- ❖ The speed detected will only be used for viewing purposes
- ❖ Values into menu :
  - SET NAME
    - You can give any name
    - Tthis name will be displayed into the gun
    - Maximum 4 characters
  - PRESS. : will be shown on the display when the set is loaded
    - Value of the regulated pressure
    - If set by the gun, the stored pressure value will be the regulated pressure value at the time the set was created
    - Will be shown into the gun when the set is loaded
  - PULSE : dwell  $\mu$ s , pulse duration to the solenoid , min 1500  $\mu$ s – max 3900  $\mu$ s
  - VOLT : volt value of capacitor, min. 50v - max 88v



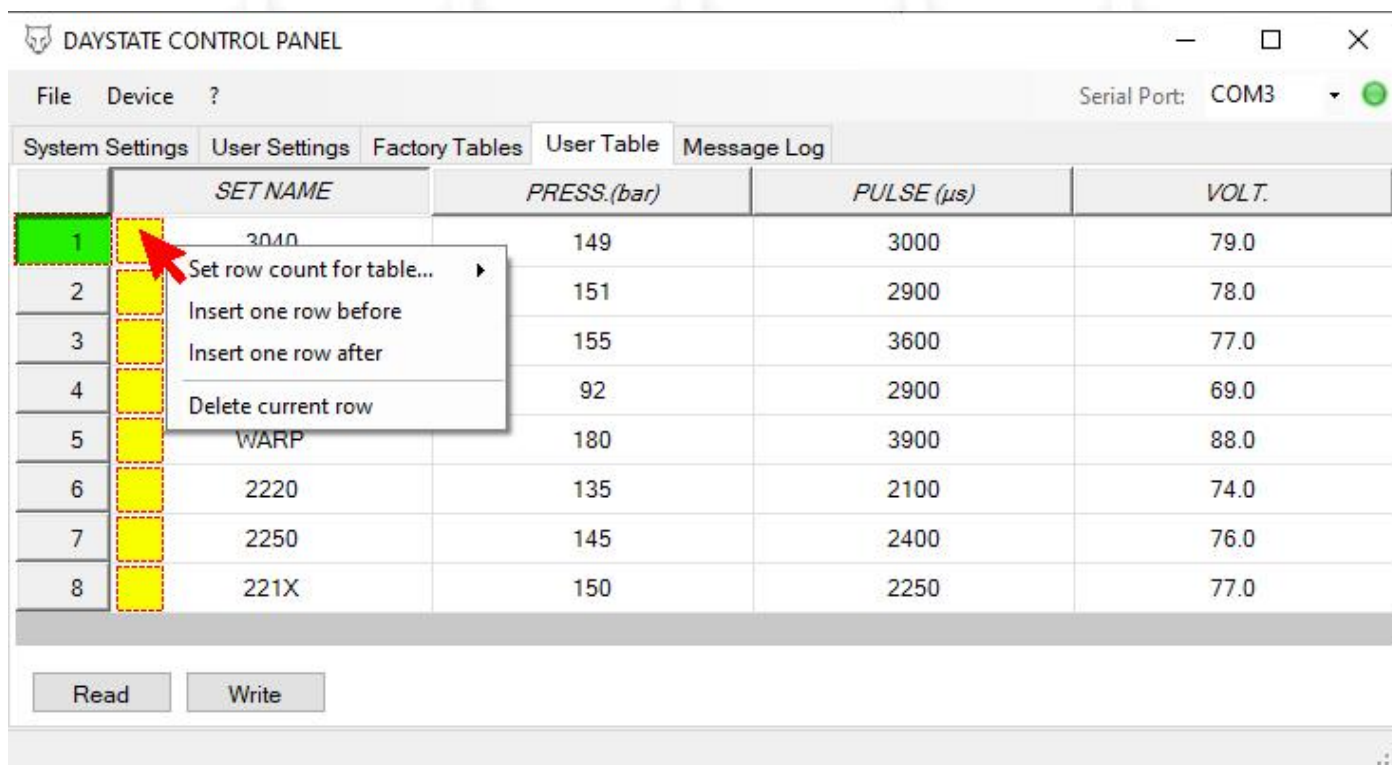
- **Do the user table from control panel**
  - Right click on grey area , then select the number of row



- Insert the name / values and press enter

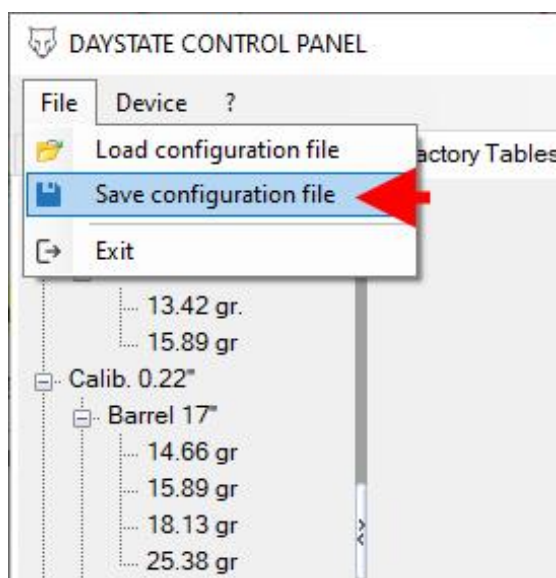


- **Managing the user table from control panel**
  - To modify name or value , left click on the box that you want modify , then insert value and press enter
  - To add /remove new set from already loaded user sets , right click on the white area near the position number you want manage ,then select a function from side menu



- To save your User table sets
  - file > save configuration file

**\* in the configuration file, all the data present in the control panel , in all menus , are saved.**



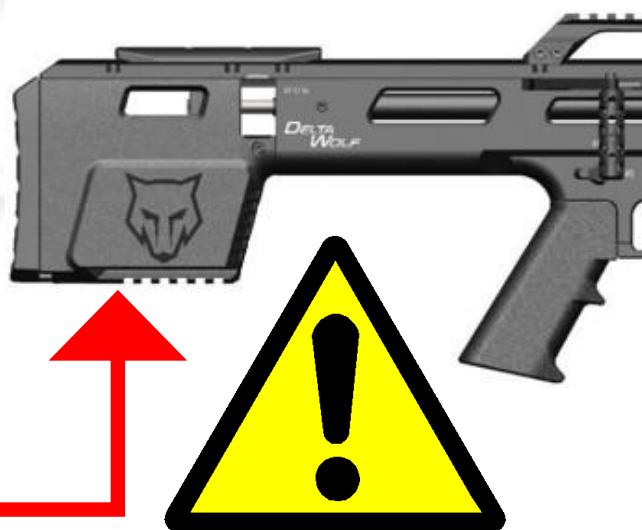
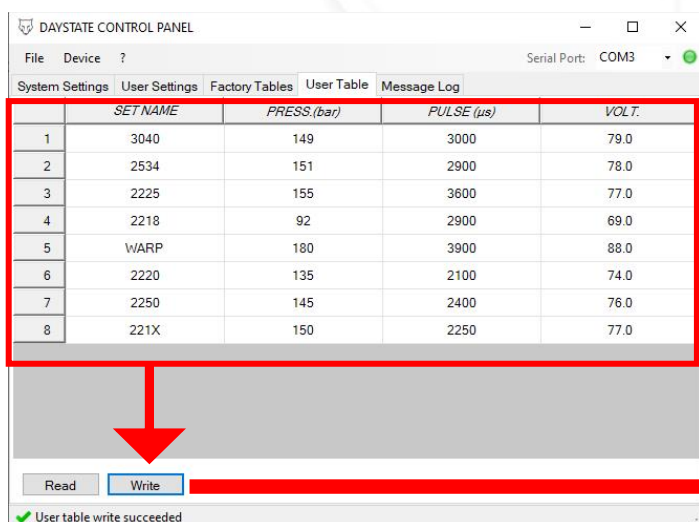
- To load User table sets to the gun
  - Press write to load the tables sets in the gun

## WARNING !

When you press write **all the user table sets inside the menu** will be loaded to the gun

This means that :

- If there were already user table inside the gun, they would be completely overwritten
- **If no user table has been loaded into the control panel (loaded from configuration file or read from the gun) and you press WRITE , you will delete all the user table and therefore they will not be selectable/usable in the gun**
- If you are creating the whole sets of tables, they must all be on the same screen
- If you want insert a new user table, you will first have to load the user tables sets (from gun or from conf. file) and then insert it





- **Do the user table from gun**

- Go to advanced shot setting , then press



- Select new set



- Using the red buttons, set the desired value, keep the button pressed to increase the speed of change
- Press blue button to confirm



- Using the red buttons, set the desired value, keep the button pressed to increase the speed of change
- Press blue button to confirm



- By adjusting the pressure regulator, set the desired pressure.
- The pressure is shown in real time on the blue button
- When you have reached the desired pressure, press the blue button to confirm



- Using the red buttons, set the name ,then press blue button/area to confirm
- Screen back to home screen automatically



- To make the firing set active, the set must be loaded by selecting it from the menu
- Go to advanced shot setting and press , press recall set , side swipe to find the name of the set you want to load than press , the menu will return to the main screen, showing the active set and its values



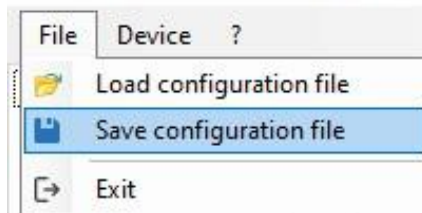
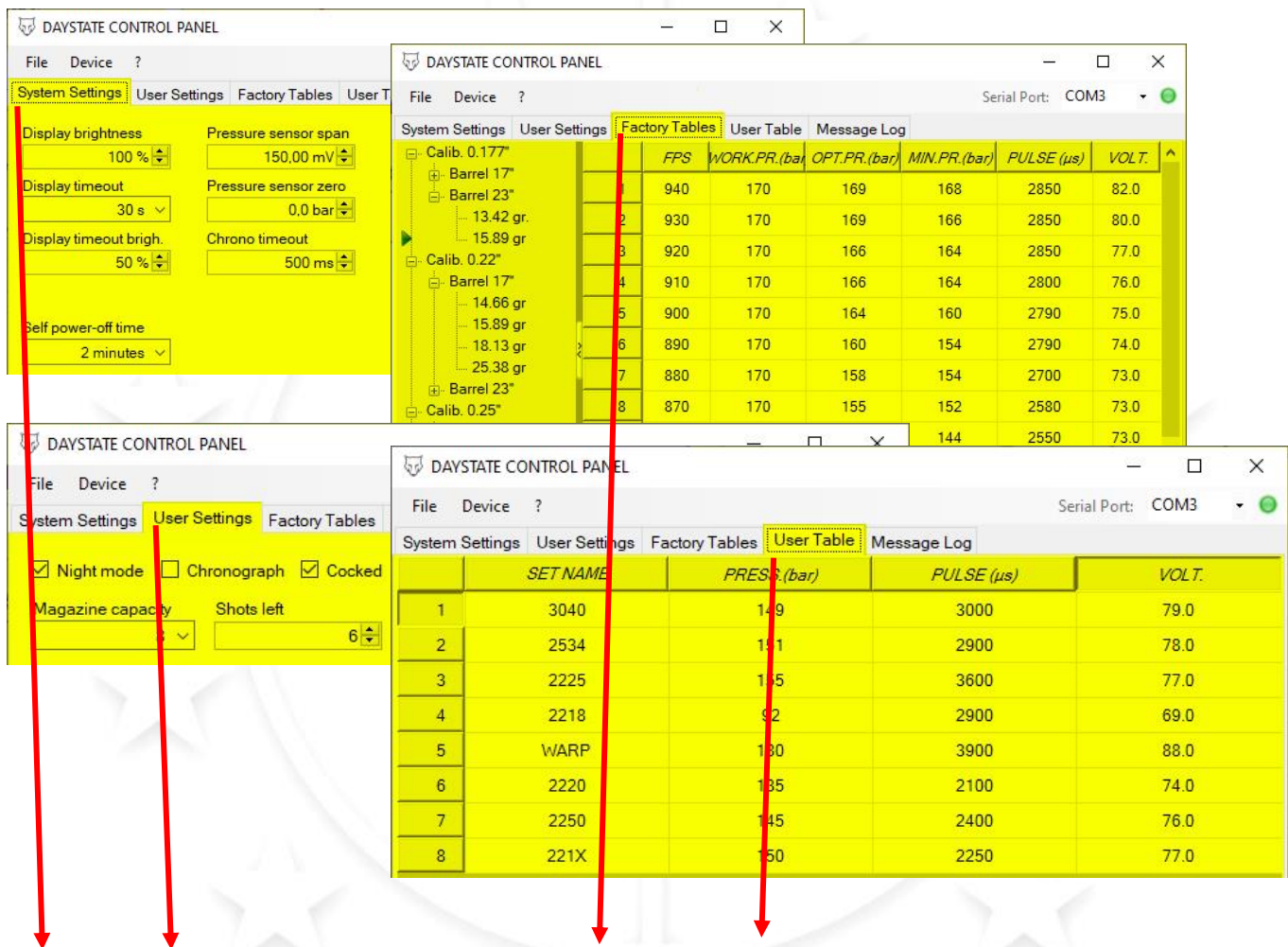
- it is also possible rename or delete the set



## ➤ CONFIGURATION FILE

- Is a file **.xml** where all the settings and values of all menus (message log menu excluded ) that is shown in the control panel at the time of saving, are stored.
- To save a configuration file :

 DAYSTATE CONTROL PANEL

The screenshots show the following settings being highlighted:

- System Settings:** Display brightness (100%), Display timeout (30 s), Display timeout bright (50%), Self power-off time (2 minutes).
- Factory Tables:** A table with columns: FPS, WORK.PR.(bar), OPT.PR.(bar), MIN.PR.(bar), PULSE (μs), VOLT. The table contains 8 rows of data for different calibers and barrel lengths.
- User Settings:** Pressure sensor span (150.00 mV), Pressure sensor zero (0.0 bar), Chrono timeout (500 ms).
- User Table:** A table with columns: SET NAME, PRESS.(bar), PULSE (μs), VOLT. The table contains 8 rows of data for different set names and pressures.

**CONFIGURATION FILE. XML**