## The Military CYPRES Quick Guide For Operators

The military CYPRES is available in the following standard models:

All models can be adapted with a one or two-pin cutter.

#### 1000/35 A

#### 1500/35 A













1000/35 indicates that this unit is set to activate at approximately 1000 ft above the DZ if the vertical speed is faster than approximately 35 meters / second (~ 78 mph)

1500/35 indicates that this unit is set to activate at approximately 1500 ft above the DZ if the vertical speed is faster than approximately 35 meters / second (~78 mph)

#### 1900/35 A

#### 2500/35 A













1900/35 indicates that this unit is set to activate at approximately 1900 ft above the DZ if the vertical speed is faster than approximately 35 meters / second (- 78 mph)

2500/35 indicates that this unit is set to activate at approximately 2500 ft above the DZ if the vertical speed is faster than approximately 35 meters / second (~78 mph)

The A indicates that all CYPRES work with absolute pressure

For further information's or questions please contact military@cypres.aero



## The Military CYPRES Quick Guide For Operators

The military CYPRES is available in the following standard models:

All models can be adapted with a one or two-pin cutter.

#### 2500/29 A

#### Changeable MODE





2500/29 indicates that this unit is set to activate at approximately 2500 ft above the DZ if the vertical speed is faster than approximately 29 meters / second (~ 65 mph)

Activation altitude according to each Mode

active BDZ (Below DropZone)
Activation altitude down to MSL



Available for all military models but on request only This feature increases the chance of unwanted activation's inside the airplane

The A indicates that all CYPRES work with absolute pressure

For further information's or questions please contact military@cypres.aero



### 2 Application Modes

### **Training Mode**

The feature of the civilian CYPRES properties were adapted to the various military models. The activation altitude and speed criteria are based on the military model. (see reference data in the user's guide). While on the ground it takes care of all meteorologic pressure changes during the next 14 hours.

Useful if you are doing training jumps, when Take OFF and landing (Target DZ) will be at the <u>same</u> location / elevation. Flight counter available on Training Mode flights only.



Take OFF / Landing

### Operation Mode

The unit can be set to every DZ on this globe, whether it is the Dead Sea or the Himalaya or even to a higher virtual DZ e.g. HAHO jump.

It is possible to do the programming prior to Take-OFF, during flight and even inside an active pressurized cabin.

Just enter the absolute air pressure value (hPa) of your Target DZ into the control unit display.

No flight counter available in Operation Mode.



Landing



Take OFF



### Quick Guide - General Guidance -

### Explanation of the symbols / icons in this Quick Guide



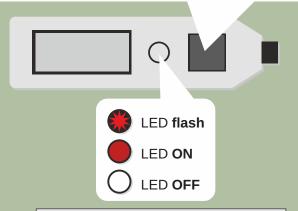
click the button (a short press and release)



hold the button (keep the button pressed)



release the button





next indication / action



indication sequence ends with

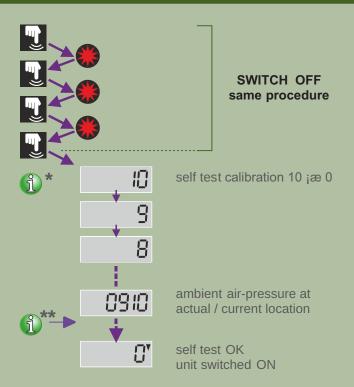


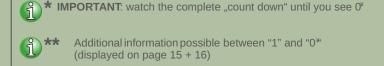
continues from "10" to "0"

e.g. calculation examples in blue



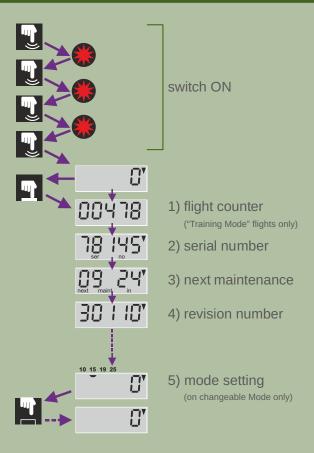
# Switch ON Training Mode





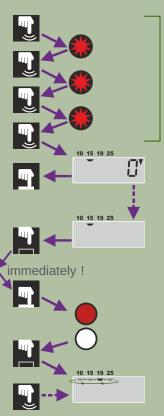


### **Unit Information**





### Changing the Mode 1000 / 1500 / 1900 / 2500



switch ON in "Training Mode"

#### self test calibration 10 ⇒ 0

- right when 0' appears,
   quickly press the button and keep it pressed
- you will see a series of information about your CYPRES (see "Unit information")
- wait until the bar shows the actual mode setting (10 / 15 / 19 / 25)
- let the button go and press again quickly and keep it pressed
- CYPRES turns ON the LED
- when the LED is OFF immediately lift your finger
- the setting will cycle through all possible mode's (10 / 15 / 19 / 25)
- click your new choice

then the CYPRES will switch itself OFF.



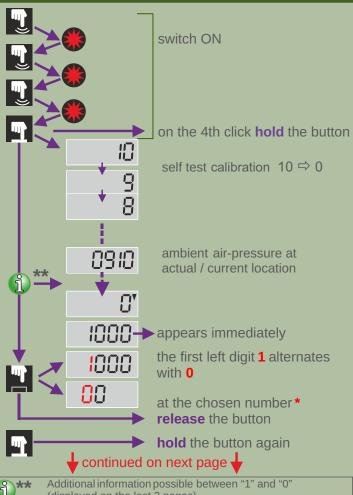
the change is not completed yet!

you have to repeat the entire procedure once more to complete and fix the mode change.



# Switch ON Operation Mode

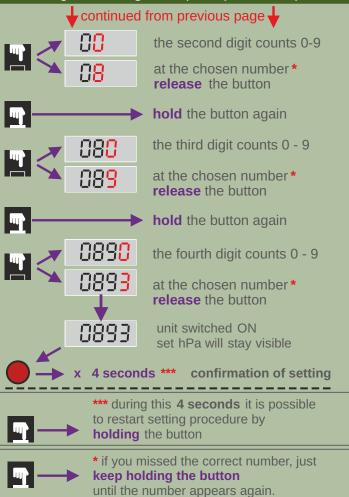
"Entering hPa of Target DZ" (Example 893 hPa)



(displayed on the last 2 pages)

# Switch ON Operation Mode

"Entering hPa of Target DZ" (Example 893 hPa)





## Operation Mode Using The Military Calculator



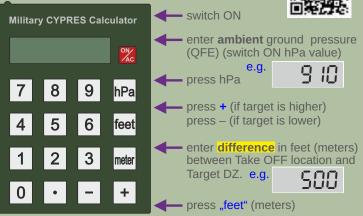
If absolute air-pressure (hPa) of Target DZ is not available



### METHOD 1 --> if:

- Target Dz and Take Off area are local but at different elevations
  - Take Off elevation is available
  - Target DZ elevation is available





### display shows hPa of Target DZ

enter value into the Military CYPRES











## Operation Mode Using The Military Calculator



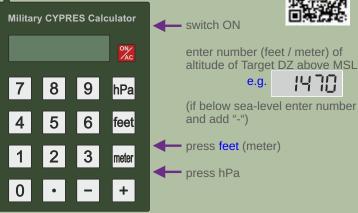
If absolute air-pressure (hPa) of Target DZ is not ayailable



### METHOD 2 --> if:

 Target DZ and Take Off area are at different locations
 elevation of Target DZ is available





#### display shows hPa of Target DZ

(only an estimation as this pressure value does not accommodate local weather variations)

enter value into the Military CYPRES









## Operation Mode Using The Military Calculator

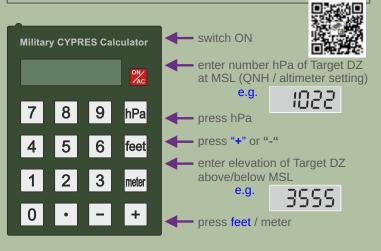


If absolute air-pressure (hPa) of Target DZ is not available



### METHOD 3 --> if:

- Target DZ and Take Off area are at different locations
- Target DZ pressure at Mean-Sea-Level (QNH / Altimeter setting) is available



#### display shows hPa of Target DZ

enter value into the Military CYPRES











## Important Notes For Airplane Pilots!

### If you use the Military CYPRES in Training Mode (also see next page)

- Every Military CYPRES has to exceed an altitude of more than 1500 ft above activation altitude to become fully armed.
- Never descend to an altitude below the Take OFF elevation
- If the aircraft can be pressurized, make sure that the cabin remains open when the turbines are started up. Leave a window, a door open slightly until after lift-off. Make sure that the cabin pressure cannot build up above the air pressure on the ground.

(! the altimeter should never go below "0")

### Always: If you use the Military CYPRES in Operation Mode and Training Mode

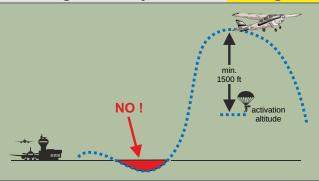
- Stay below the vertical activation speed inside the activation window; 6900 ft/min (35 m/s) or 5700 ft/min (29 m/s) if you are descending with the aircraft. Can also be simulated by changing the cabin air pressure.
- CYPRES with dom before November 2021 will lock itself with the PSE error if exposed to elevation ranges above 38.000 ft / 11.700 m (equivalent to 200 hPa).
   All new CYPRES after 11/2021 and all service units will have / get a new and extended elevation range up to 65.000 ft / 20.000 m



### Important Notes For Users!

- To make sure that a Military CYPRES device is armed when it is used in Training Mode you must flyat least 1500ft above the preset firing altitude. The Military CYPRES device is always armed when in Operational Mode. For this reason please switch off after landing.
- A two canopy scenario can occur, if the main deploys too low and the opening reaches into the activation window.
- In case of Training mode only: After take-off please ascend at more than 180 feet per minute (1 meter / second) for at least 30 seconds.

The drawing below shows what must be adhered to when using the Military CYPRES in Training Mode!



### If the Military CYPRES is used in <u>Operation Mode</u>, the above mentioned limitations do not apply.

- The CYPRES 2 is waterproof (in fresh and salt water) for 15 ft for up to 15 minutes; - 8 ft for up to 24 hours
- After contact with water, CYPRES must be switched OFF after exiting the water. - replace filter before next use
- After an activation, the cutter can be replaced by any rigger / packer.
   After the change, perform a self test and the unit can be used again immediately.
- After 14 hours have passed, every CYPRES unit will switch off automatically. No matter of the actual location.



## Information On Control Unit Display

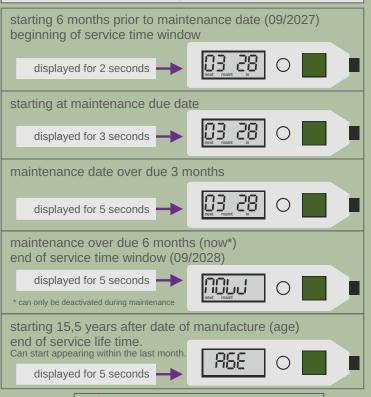
### These notes will eventually appear during the self test procedure between 1 and 0

These messages are not ERROR codes. Only helpful information's.

The service window frame is 13 months.

Example: date of manufacture 03/2023, the first maintenance is possible 09/2027 until 09/2028

The second maintenance is possible 09/2032 until 09/2033





# Error Codes On Control Unit Display

If there is an error detected during the self test then it shows this code for about 2 seconds before it switches itself OFF. One or both cutters are not electronically connected to the unit. Reasons: activated cutter, damaged cable, plug not completely connected. **Action:** replace or reconnect cutter. Switch ON procedure can be repeated. If self test is OK CYPRES can be used again Excessive pressure variations during self test. Possible reason: moving vehicle or moving aircraft. **Action:** Switch ON procedure can be repeated. If self test is OK CYPRES can be used again Low battery condition. Action: contact Airtec / SSK before further use Power Down Action: contact Airtec / SSK before further use Checksum Error Action: contact Airtec / SSK before further use Pressure Sensor Error Action: contact Airtec / SSK

If unit does not switch OFF after 14 h, or another code is shown on display, or if there is no red light, do not use the CYPRES and contact Airtec HQ military@cypres.aero or SSK info@sskinc.com before further use



before further use