CYPRES 2
Reliability made in Germany

Military CYPRES 2 User Guide

This User Guide is the original version of this document. The latest version can be downloaded at www.militarycypres.cc. This revision applies only to the CYPRES 2 models mentioned here and replaces and supersedes all previous applicable revisions*. Please see www.militarycypres.cc to check/download the latest revision. Subject to change without notice.

Military CYPRES 2 User Guide C2ME-34 as revised 08/2022 Art. No. 991105.

* If your CYPRES does not have the latest upgrades/updates installed, it may not offer all of the options that are included in the latest User Guide.

CYPRES 2
Military User Guide

- English -

CYPRES 2
Reliability made in Germany

Congratulations on choosing CYPRES 2, without doubt the safest and most accurate AAD ever produced.

Like most parachutists, you probably assume that you will always have time to deploy your reserve canopy yourself and that situations requiring the use of an automatic activation device will always happen to others. We do hope you can avoid such trouble and that your CYPRES 2 will never have to take action to save your life. Nevertheless, situations requiring the activation of CYPRES 2 can happen to any parachutist, no matter how careful and experienced. Should CYPRES 2 ever decide to initiate your reserve opening, you will know that you have not left your safety to chance.

Airtec GmbH & Co. KG Safety Systems

Contents

1. Function

1.1 Design philosophy

CYPRES 2 (which stands for “CYbernetic Parachute RElease System”) is an automatic activation device that meets all of the needs of today’s parachutists.

The device is simple to operate: Switch it on in Training Mode when your DZ and airfield are at the same location and height, and use Operational Mode when jumping into a remote DZ. You do not need to switch it off because CYPRES 2 will do this automatically.

When used in Training Mode, CYPRES 2 will check the weather conditions continuously during the day by measuring the air pressure twice a minute. This means that the unit should always be precisely calibrated to the ambient air pressure at ground level.

The parameters of the various CYPRES 2 models have been chosen to meet the needs of the vast majority of parachutists, without interfering with routine parachuting operations. Millions of jumps with CYPRES since 1991 have proven the soundness of these parameters. Certain specific activities may nevertheless require special considerations or CYPRES 2 settings. Freefall - or any vertical speed that is greater than the activation speed at the defined activation altitude (with a 1000/35 A Military CYPRES 2 this is set to 35 meters per second/78 mph at sea level) - will cause CYPRES 2 to activate.

The CYPRES family of AADs is exceptionally reliable. CYPRES units have saved the lives of well over 5,100 parachutists to date and no unit has ever failed to activate when the appropriate conditions have been met. CYPRES 2 is truly the most reliable piece of parachuting equipment ever produced.

⚠WARNING

CYPRES 2 cannot open your reserve - it is only intended to cut your reserve closing loop. CYPRES 2 is strictly a backup device and is not a substitute for proper training and the timely execution of emergency procedures. It may show a faulty display or fail at any time for any reason, potentially causing injury or death. Do not use CYPRES 2 if you do not accept these risks. You must ensure that the reserve closing loop passes through the cutter hole. If you loan, rent or sell your CYPRES 2 to somebody else it is your responsibility to communicate this warning to them.

The CYPRES 2 combines tried and tested quality and reliability with a wealth of expertise and technological progress following many years of continuous research and development since 1991. CYPRES 2 offers numerous features and attributes including the following:

- The unit is waterproof for up to 15 minutes down to a depth of 15 feet (5 meters) in both freshwater and saltwater. At a depth of 8 feet (2.5 meters) or less the unit is waterproof for up to 24 hours.
- The unit's power supply is maintenance-free for the user. There is no need to observe a replacement date, record the number of jumps made, monitor the voltage during self-test, purchase a battery, or have a rigger open or repack the reserve for this reason.
- The serial number can be accessed from the display.
- The maintenance due date can be accessed from the display.
- The unit will remind you when it is approaching its next maintenance date.
- The unit is small and lightweight.
- The unit has a robust, rigger-friendly case with rounded corners and edges.
- The unit has an extended maintenance window of +/- 6 months from the month of manufacture. This allows the user to avoid downtime during the busy part of the year regardless of the month of manufacture.
- The unit completes its self-test in 10 seconds.

1.2 Components

CYPRES 2 consists of a control unit, a processing unit and a single release unit (cutter) for 1-pin reserve containers or two release units (cutters) for 2-pin reserve containers.

Control unit

WARNING

Do not pull, lift, carry or throw CYPRES 2 by the cables.

Processing unit

Release unit
(cutter)

1.2.1 How CYPRES 2 works

Each time CYPRES 2 is switched on it repeatedly measures the ambient air pressure over a short period of time and takes the average value as the value for ground level, thereby "zeroing" itself. This is performed during the integrated self-test.

While in use, CYPRES 2 continuously checks the air pressure while on the ground and adjusts to any fluctuations in air pressure due to changing weather conditions. While you might need to reset your altimeter before a jump, CYPRES 2 takes care of itself. This precise calibration should allow CYPRES 2 to recognize the exact activation altitude and speed.

The processing unit contains a factory-programmed microprocessor that can calculate the jumper's altitude and rate of descent in real time based on barometric pressure. By continuously monitoring this data, CYPRES 2 can make calculations regarding the jumper's altitude and rate of descent. Should CYPRES 2 decide that the jumper is in a dangerous situation (i.e., still in freefall at low altitude), the processing unit instructs the release unit to initiate the reserve container opening sequence.

The release unit (cutter) for the reserve container is completely independent of the primary reserve parachute activation system (the reserve ripcord). Rather than withdrawing the ripcord pin from the reserve closing loop, the release unit cuts the reserve closing loop inside the reserve container in order to initiate the opening sequence. Please note that the closing loop must pass through the cutter hole.

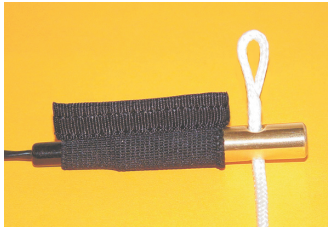
Initiating a reserve container's opening sequence by cutting the reserve closing loop is a method that was invented and patented by Airtec's founder Helmut Cloth in 1987.

The CYPRES 2 activation system offers numerous advantages:

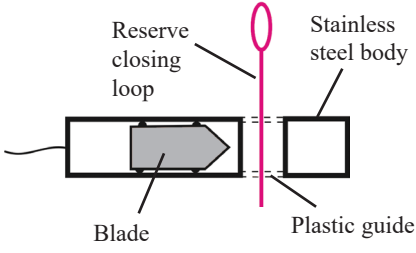
- The reserve container opening sequence can be initiated either by the jumper pulling the reserve handle or by CYPRES 2 cutting the reserve closing loop.
- The only mechanical component is a single movable piston in the release unit.
- The activation system is located inside the reserve container where it is not exposed to excessive shocks or other adverse influences.

- The system is unobtrusive and can be installed so that it is undetectable from the outside.

Release unit (cutter) with elastic keeper



Functional diagram:



In the event of an activation the piston moves a distance of approx. 5 mm.

The release unit (cutter) is completely self-contained and has been specifically developed for CYPRES 2. In the event of an activation, nothing escapes or is expelled.

An 18-month investigation by BAM (Bundesanstalt für Materialprüfung), Berlin, tested a total of 99 release units. Following this investigation, BAM and the U.S. DOT classified the CYPRES 2 as being non-hazardous.

Thanks to its high degree of reliability and other properties, the CYPRES 2 release unit is currently being used in aerospace applications (satellites).

The Training Unit

ENTER Training Mode by switching on the CYPRES 2 on the ground: click, click, click, click. That's it. No need to do anything else.

The features from the civilian version of the CYPRES 2 have been adapted to the various military models by retaining the unit's incredible convenience and reliability (please note that the activation altitude and speed criteria are based on the Military model. See Section 12: Technical Data for further information).

This mode is ideal whenever you are doing routine training jumps. This is when you go to an airfield or DZ, enter an airplane or helicopter, perform a descent, land on that same airfield or DZ at the same elevation, repack there, and do one or more subsequent jumps. No matter how many jumps you do and what kind of parachuting activity you are performing, the only attention that your Military CYPRES 2 unit requires is your click, click, click, click procedure to switch on the unit and monitor the self-test before your first jump of the day.

The Military CYPRES 2 unit in Training Mode will take account of meteorological influences during the day, including the extreme pressure changes brought about by a bad weather front.

As long as the airfield/DZ are at the same elevation or are in the same location, the Military CYPRES 2 unit is ideal for your training operations and requires little attention once it has been switched on.

The Operational Unit

ENTER Operational Mode by keeping the push button depressed after the last (4th) switch-on click and enter the pressure value for the elevation at your intended landing site.

This feature of the Military CYPRES 2 unit should keep the parachutist safe during virtually every military operation imaginable.

The unit can be set to every DZ in the world from the Dead Sea, the lowest point on Earth, to the Himalayas in Asia, the highest point on Earth, or even to a higher virtual DZ during a HAHO jump.

The unit can be programmed to another DZ prior to take-off, while the parachutist is still on the ground.

Alternatively, you can choose your DZ while you are already in flight and then program it at altitude.

You can also choose or change your DZ while you are in flight in an active pressurized cabin and program it there.

Setting the DZ is very straightforward: Just enter the air pressure value for your target DZ into your Military CYPRES 2 unit.

Setting the pressure value is intuitive and takes less than 45 seconds.

Should the conditions for activation be met, in Operational Mode your Military CYPRES 2 will activate at 1,000 feet, 1,500 feet, 1,900 feet or 2,500 feet, respectively (depending of what kind of unit you have or what mode you have chosen if you have a Military Changeable Mode CYPRES 2).

A number of tools are available (digital calculator, downloadable apps) to help you to find the right setting for any place in the world. These tools are easy to use and simply require a few minutes of familiarization.

NOTICE If you use your CYPRES 2 in Operational Mode, please switch it off after completing your mission rather than allowing it to switch off itself.

1.4 Power supply

You do not need to worry about CYPRES 2's power supply in any way, other than by remembering to switch off the unit after completing your mission in Operational Mode.
The unit should function from the date of manufacture (DOM) until the end of its service life.
If CYPRES 2 ceases to function or displays an error code during the self-test please contact Airtec or SSK.
No CYPRES 2 user has ever had to pay for a battery since 2003, provided that the maintenance intervals have been adhered to.

1.5 Operational safety

There are two important points to remember regarding the operational safety of your CYPRES 2:

1. CYPRES 2 self-tests automatically every time it is switched on. After every switch-on procedure, CYPRES 2 executes a self-test routine that checks all key internal functions. A successful self-test gives you the best possible assurance that your unit will provide trouble-free operation for up to 14 hours. When the display unit shows `0`, the self-test has been successfully completed. If the self-test has detected an error or discrepancy, CYPRES 2 will not enter normal operating mode but instead will switch itself off after displaying an error code indicating why the self-test process has been aborted (see Section 5).
2. CYPRES 2 has a fail-safe error detection system. Two processes are activated in CYPRES 2 once the unit has been switched on: a primary operational process and an independent control process that continuously monitors the

operational process. Should an error occur while the operational process is active, the backup control process should switch the unit off.
Depending on the type of error and its potential impact, CYPRES 2 can either be switched on again or it will remain permanently in shutdown mode. With certain error codes (see Section 5) the user will be unable to reactivate the unit. In these cases, CYPRES 2 must be sent to the manufacturer or to your service center for inspection and adjustment.

⚠WARNING

A malfunction can cause a false activation/failure to activate: Any technical device can fail. Every fault imaginable can happen with the CYPRES 2 including, but not limited to: displaying a faulty status, failing to function, or functioning at the wrong moment or in the wrong circumstances. Such a failure could easily injure or kill you or others. If you or your friends or relatives are unwilling to accept these uncertainties and risks you must not use CYPRES 2.

2. Product overview

Military CYPRES 2 is available in the following standard models:

1000/35 A
1500/35 A
1900/35 A
2500/35 A
2500/29 A
Changeable MODE Mil

The difference between the first four versions is the activation altitude. The fifth differs from the first four versions in terms of its vertical activation speed. The sixth version is the Changeable MODE Mil CYPRES 2, which allows users to switch between modes **10**00/35 - **15**00/35 - **19**00/35 - **25**00/35.
The A indicates that the pressure value for a target DZ at a different elevation must be set at an absolute pressure value (only in Operational Mode).
All units can be fitted with either a one-pin cutter or a two-pin cutter. These can be exchanged at any time by unplugging the old one and plugging in the new one.

1000/35 A

1000/35 A indicates that this unit is set to activate at approx. 1,000 ft above the DZ if the vertical speed is faster than approx. 35 m/s (about 78mph). This model is designed for versatile military use and is recommended for solo jumps carrying little or no equipment. The activation setting reflects the short opening distance of smaller tactical square parachutes.
Can also be used on the bundle for MTTB jumps. Contact the manufacturer of your parachute/container system for further assistance.

1500/35 A

1500/35 A indicates that this unit is set to activate at approx. 1,500 ft above the DZ if the vertical speed is faster than approx. 35 m/s (about 78mph). This model has been developed to suit various applications using tactical canopies and higher payloads. It is recommended for multi-mission solo jumps with or without drogue deployment systems. The higher activation altitude of 1,500 ft is appropriate for the longer opening distance of most tactical canopies used in the field.
Can also be used on the bundle for MTTB jumps. Contact the manufacturer of your parachute/container system for further assistance.

Model	Nato Stock Number
M-CYPRES 2 1000/35 1-pin absolute calibration	1670-12-361-9578
M-CYPRES 2 1000/35 2-pin absolute calibration	1670-12-361-9579

Model	Nato Stock Number
M-CYPRES 2 1500/35 1-pin absolute calibration	1670-12-361-9580
M-CYPRES 2 1500/35 2-pin absolute calibration	1670-12-361-9581

1900/35 A

1900/35 A indicates that this unit is set to activate at approx. 1,900 ft above the DZ if the vertical speed is faster than approx. 35 m/s (about 78mph). This model has been adapted to meet the needs of "slick" (no combat equipment) military tandem and multi-mission solo operations or operations with large payloads. Taking into consideration the higher altitude required for tandem canopy deployment as well as the considerable opening distance of tandem reserve canopies, this device is set to an activation altitude of 1,900 ft.

Do not use for solo jumps with tandem equipment fitted with a large drogue system.

Contact the manufacturer of your parachute/container system for further assistance.

Model	Nato Stock Number
M-CYPRES 2 1900/35 1-pin absolute calibration	1670-12-361-9582
M-CYPRES 2 1900/35 2-pin absolute calibration	1670-12-361-9583

2500/29 A

2500/29 A indicates that this unit is set to activate at approx. 2,500 ft above the DZ if the vertical speed is faster than approx. 29 m/s (about 65mph). This model is recommended for “heavy” (two jumpers with full combat equipment) tandem and MTTB (bundle) operations. The activation altitude of 2,500 ft addresses large parachute deployments and heavy loads. The activation speed of 29 m/s has been adapted to the slower fall rate under a large drogue following a cutaway of the bundle load.
For the bundle delivery parachute we recommend a vertical separation of no less than 1,000 ft. We recommend that this system be combined with the 1500/35A or 1000/35A model.
Contact the manufacturer of your parachute/container system for further assistance.

Model	Nato Stock Number
M-CYPRES 2 2500/29 1-pin absolute calibration	1670-12-361-9584
M-CYPRES 2 2500/29 2-pin absolute calibration	1670-12-361-9585

2500/35 A

2500/35 A indicates that this unit is set to activate at approx. 2,500 ft above the DZ if the vertical speed is faster than approx. 35 m/s (about 78mph).

This unit is made for operations where a higher activation altitude and 35 m/s (78 mph) is preferred. Do not use for solo jumps with tandem equipment and MTTB (bundles) including large drogue systems.
Contact the manufacturer of your parachute/container system for further assistance.

Model	Nato Stock Number
M-CYPRES 2 2500/35 1-pin absolute calibration	n.a.
M-CYPRES 2 2500/35 2-pin absolute calibration	n.a.

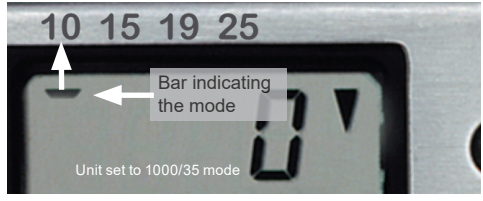
Changeable MODE Mil CYPRES 2

The Changeable MODE Mil CYPRES 2 can be recognized by the olive button with the white "Changeable MODE" lettering on the control unit.
Features:

- Flexible mode change in the field
- Safe setting procedure
- Prevents unwanted mode change

The user can switch as required between the various modes (1000/35 - 1500/35 - 1900/35 - 2500/35). The procedure for switching the mode is designed to prevent the mode being changed unintentionally. All handling for this unit is identical to all other military CYPRES 2 units.
The behavior of each mode is identical to that of each individual original military model.
When the unit is on, the current mode is indicated by a bar below the relevant mode.
Note: The default factory setting of new changeable MODE Mil units is: Mode 1500/35.

When you switch on the Changeable MODE Mil CYPRES 2 it immediately displays the set mode. While it is ON it continuously displays the set mode. If the bar is covered by another display, it will blink to indicate the set mode.



⚠WARNING

An inappropriate mode can cause a false activation/ failure to activate.
Using an inappropriate mode could easily injure or kill you or others.
Always use the unit in the appropriate mode.
Never use the device in an inappropriate mode under any circumstances or for any reason.

To change the mode:

1. Switch on the unit. When 0 appears
   immediately press + hold the button
2. Various information will be displayed (serial number, etc). Wait until you see the bar that shows the current mode setting 10 15 19 25
3. Indicate that you want to change the mode by
   briefly releasing and then pressing + holding the button
4. CYPRES 2 will confirm by flashing the LED for 1 second
5. When the LED turns off
   immediately release the button
6. The bar will cycle through each of the modes
   

   Click to select your new choice
7. To confirm the setting
   repeat the procedure once more

The mode will only change when you complete steps 1-7 of the procedure identically twice in a row. Otherwise, the unit will remain in its current mode.

Note:
Changing the mode will automatically reset the chosen mode to the standard settings for the relevant model (see Section 12).
You must always keep your control unit pocket (or window) clean and clear in order to ensure that you can recognize all of the signs on the display at all times.

⚠WARNING

A malfunction can cause a false activation/failure to activate:
Any technical device can fail. Every fault imaginable can happen with the CYPRES 2 including, but not limited to: displaying a faulty status, failing to function, or functioning at the wrong moment or in the wrong circumstances.
Such a failure could easily injure or kill you or others.
If you or your friends or relatives are unwilling to accept these uncertainties and risks you must not use CYPRES .

3. Installation

When the CYPRES AAD was introduced it was necessary to establish a testing and evaluation procedure for the installation of this new AAD into existing harness/container systems, as no such AAD concept existed on the market. The installation had to be tested and approved. This testing was exclusively performed at Airtec GmbH & Co. KG in Germany until 2012. Airtec GmbH & Co. KG took on this task in preference to the harness/container manufacturers in order to establish the optimal installation for each system.

The variation in the resulting installation instructions was due to the different designs of the various harness/container systems. It was vital not to impede the CYPRES unit's primary function, which is to cut the reserve closing loop. It was also important to ensure that the initiation of the reserve opening (by cutting the reserve closing loop) did not hinder the reserve deployment in any way.

All CYPRES 2 installations should be performed and approved by the harness/container manufacturer in collaboration with the AAD manufacturer. If you want to install a CYPRES 2 into a container that has not been set up for CYPRES 2 you should contact the harness/container manufacturer for advice. CYPRES 2 can be integrated into rigs with existing setups. If in doubt, please contact the harness/container manufacturer.

NOTICE "Each parachute manufacturer approves the installation of the AAD on their equipment" 12/04/13 AC No: 105-2E Page 4 Part 2.b. of the Advisory Circular of the U.S. Department of Transportation, Federal Aviation Administration.

⚠WARNING

Retrofit: Comply with the specific retrofit instructions of the harness/container manufacturer.

The processing unit must be placed into the pouch in such a way that the cables lie flat on the bottom of the pouch. No tension must be placed on the control unit cable and cutter cable(s).
Any excess cable is stowed in the flat part of the pocket underneath the velcro-adjustable flap. If you are stowing both the thinner cutter cable and the thicker control unit cable, be sure to place the thicker cable so that it lies on top of the thinner one. Cables should be placed in a circle in order to avoid twists. Always avoid pulling, bending, twisting, or kinking the cables.
CYPRES 2 can easily be removed by the owner. Do not pull on the cables - instead, push the processing unit, cutter and control unit from their keepers.

Wrong
- Cables not flat on bottom
- Unit is inserted upside down
- Thin cable on top of thicker cable
- Cable is bent

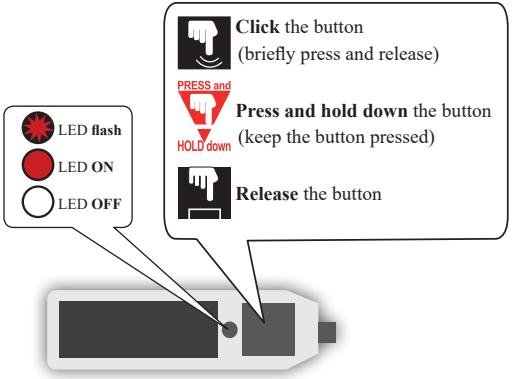
⚠WARNING

Poor installation can impede the proper opening of the container.
This may cause injury or death. Never install a CYPRES 2 by trial and error.

4. How to operate CYPRES 2

4.1 Handling the control unit

The push button on the control unit should be pressed with the fingertip; please do not use a fingernail or any other object. Use a short click action in the centre of the button.



Please familiarize yourself with switching CYPRES 2 on and off (see Section 4.2) and changing the altitude reference (see Section 4.4) prior to use.

The push button is the only means the user has to control CYPRES 2's functions. The user only needs to perform the following actions:

- Switch on
- Switch off
- Accept the default Training Mode, or select Operational Mode
- View the flight counter
  View the serial number
  View the next maintenance date
  View the rev. number

The following sections will describe these procedures in detail.

4.2 Switching CYPRES 2 on

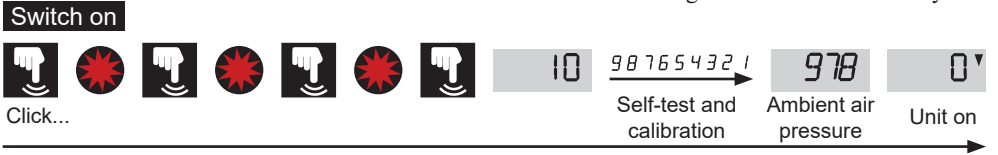
CYPRES 2 is switched on by briefly clicking the push button four times. Start the switch-on cycle by clicking the button once. After approx. one second, the red LED light will flash. You must acknowledge the red light immediately by clicking the button again. This sequence - a click as soon as the red light appears - will be repeated two more times. After a total of four clicks, CYPRES 2 will enter self-test mode.

If you do not act promptly after seeing the LED light, or if you push the button too soon, CYPRES 2 will ignore the switch-on attempt.

This four-click switch-on cycle has been designed to prevent the unit from being switched on accidentally.

Once the switch-on procedure has been completed, the unit will run through its self-test. Initially, the display will show the number 10, and then a countdown ending with 0▼. Between displaying 1 and displaying 0▼ CYPRES 2 shows the current ambient air pressure. When 0▼ with a down arrow appears, the unit is functional for the next 14 hours. After 14 hours have passed, the unit will switch itself off automatically. The unit can be switched off manually at any time using the push button. If the self-test is unsuccessful, an error code is shown on the display for approximately 2 seconds. The meaning of these error codes is explained in Section 5.

The manual switch-off sequence is identical to the switch-on procedure (click, light, click, light, click, light, click). This procedure is designed to prevent the unit from being switched off accidentally.



4.3 Using CYPRES in Training Mode

In Training Mode, CYPRES 2 must be switched on at the takeoff site on the ground. It must never be switched on while in flight or in any type of moving vehicle.
To reset CYPRES 2, switch it off and then switch it on again. The unit will then re-calibrate and "zero" itself to this elevation.

When the takeoff airfield and DZ are in the same location and all jumping activity is limited to that location, an initial switch-on at the DZ is all that is required for any number of jumps, provided that they all take place within 14 hours. Should any of the following situations arise, CYPRES 2 must be reset before the next jump:

- The DZ is missed and the parachutist lands in an area with an elevation more than 30 feet (10 m) above or below the DZ level. A reset is also required if the ground elevation changes by this amount on the return journey to the DZ.
- The unit is taken away from the airfield/DZ by vehicle or carried by hand and later brought back again.
- If the total time for a single jump (from take-off to landing) exceeds one and a half hours, CYPRES 2 will function as normal but must be reset after landing.

General recommendation: If in doubt, reset CYPRES 2.

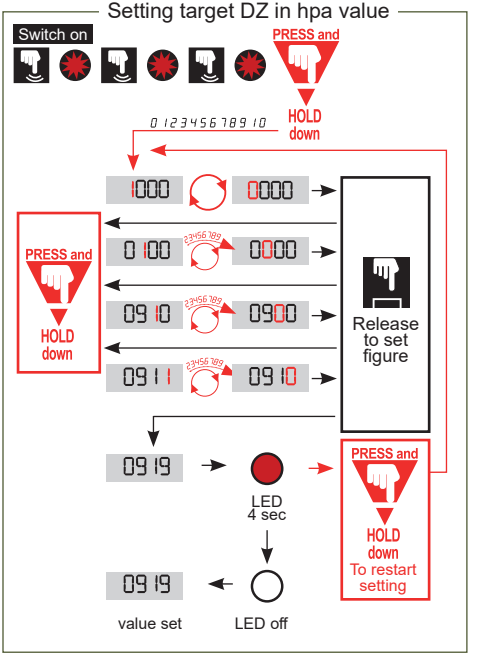
4.4 Operational Mode target DZ setting

Whenever you want to land at a DZ elevation that is different from your takeoff elevation, you must use your Military CYPRES 2 unit in Operational Mode and set it to the ground air pressure of your target DZ using a hPA value.

1. Switch on the unit and, at the fourth click, hold down the push button. Immediately after the self-test the number 1000 appears.The 1000 alternates with 0000 .
2. Release the button to choose 0000 or 1000 . The chosen figure will continue to be displayed.
3. Press and hold the button to progress to the next digit. Release the button to choose the figure.
4. - 5. Repeat this procedure for the third and fourth digit.

If you miss a digit, just hold down the push button until the digit appears again.

Once all 4 digits have been set, the red LED turns on for 4 seconds. At this stage you can still begin setting the value again to correct a mistake: Press and hold the button and start the setting once more. When the red LED turns off, the setting is fixed.



NOTICE

This method can be used to set the device
- either on the ground
- or in a flying aircraft
- or in an active pressure cabin

If you have to change your setting, you must switch the CYPRES 2 off and on again.

Tips:

If you are unable to establish the target DZ ground air pressure value in hPa, it can be calculated using one of the various calculator tools described earlier (see from Section 4.4.1).

If you try to enter a pressure of less than 200 hPa (approx. 39,000 feet above sea level) or more than 1,094 hPa (approx. -2,140 feet below sea level), the CYPRES 2 will switch itself off. The blank display indicates that the desired setting is outside the specified parameters.

⚠WARNING

An inappropriate setting can cause a false activation/failure to activate. CYPRES 2 activates at the altitude above the DZ defined by its model-specific parameters. See Section 12.

4.4.0 Below DZ

CYPRES 2 ceases all actions at ground level. All functions will stop below this level.

An optional feature allows the Military CYPRES 2 to behave differently in Operational Mode:

When a parachutist descends below the target DZ (e.g., the target DZ is on a mountain and the parachutist descends along the mountain towards a valley), this optional feature will allow the unit to activate the cutter even below the original programmed target DZ elevation in case the activation speed is exceeded.

(This feature is built to order only and will be indicated with a ⏚ symbol on the left side of the control unit).

4.4.1 Circular calculator

The circular slide ruler is no longer available.

4.4.2 Military CYPRES 2 Calculator

If the atmospheric (absolute) air pressure value of the target DZ is unknown, this value can be calculated using the Military CYPRES 2 Calculator (feet/meters/hPa/InHG) developed by Airtec.

See the instructions on the rear of the calculator:

If your target is where your takeoff location is but at a higher altitude:

- Enter your ambient ground pressure (Military CYPRES 2 tells you this during self-test)
- Press “hPa”
- Press “+”
- Enter the number of feet between you and your target DZ
- Press “feet”

The display will show the air pressure in hPa for your target DZ.

If your target is at another location and the air pressure at that location is unknown:

- Find out how many feet your target DZ is above sea level
- Enter that number (followed by “-”, if target is below sea level)
- Press “feet”
- Press “hPa”

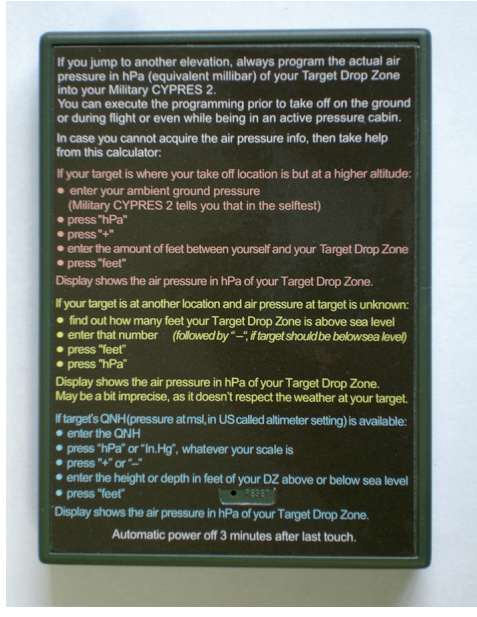
The display shows the air pressure in hPa of your target DZ.
This may not be perfectly accurate as it doesn’t take account of the weather at your target DZ.

If the target DZ’s QNH (pressure at msl, called the “altimeter setting” in the US) is available:

- Enter the QNH
- Press “hPa” or “In.Hg”, as appropriate
- Press “+” or “-”
- Enter the height or depth in feet of your DZ above or below sea level
- Press “feet”

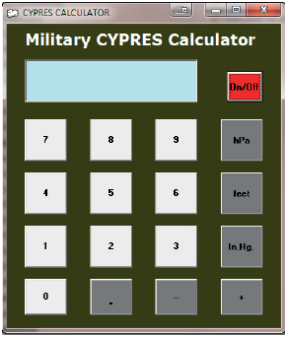
The display shows the air pressure in hPa of your target DZ.


Military CYPRES Calculator
0
ON/
CLR
7
8
9
hPa
4
5
6
feet
1
2
3
In.Hg
0
.
–
+


If you jump to another elevation, always program the actual air pressure in hPa (equivalent millibar) of your Target Drop Zone into your Military CYPRES 2.
You can execute the programming prior to take off on the ground or during flight or even while being in an active pressure cabin.
In case you cannot acquire the air pressure info, then take help from this calculator:
If your target is where your take off location is but at a higher altitude:
• enter your ambient ground pressure
(Military CYPRES 2 tells you that in the selftest)
• press "hPa"
• press "+"
• enter the amount of feet between yourself and your Target Drop Zone
• press "feet"
Display shows the air pressure in hPa of your Target Drop Zone.
If your target is at another location and air pressure at target is unknown:
• find out how many feet your Target Drop Zone is above sea level
• enter that number (followed by "–", if target should be below sea level)
• press "feet"
• press "hPa"
Display shows the air pressure in hPa of your Target Drop Zone.
May be a bit imprecise, as it doesn't respect the weather at your target.
If target's QNH (pressure at msl, in US called altimeter setting) is available:
• enter the QNH
• press "hPa" or "In.Hg", whatever your scale is
• press "+" or "–"
• enter the height or depth in feet of your DZ above or below sea level
• press "feet"
Display shows the air pressure in hPa of your Target Drop Zone.
Automatic power off 3 minutes after last touch.

4.4.3 Military CYPRES Calculator (software version)

Software versions of the Military CYPRES 2 Calculator are also available.
At www.militarycypres.cc it is available as a Windows version.



It is also available online as an App for Android and iOS free of charge, featuring the same Military CYPRES 2 Calculator as described in Section 4.4.2

Download on the App Store

Google play

4.5 Access to unit information

CYPRES 2 provides an easy way to view

1. the flight counter*
2. the unit's serial number
3. the next maintenance date**
4. and the rev. number:

When 0' appears at the end of the switch-on procedure press the button immediately and hold it down.
Each value is displayed for 5 seconds, then the next value will appear.

You can stop the information sequence at any time by simply releasing the button.

* The flight counter only counts flights that are made in Training Mode.
** After the last maintenance has been performed, the words 'maint. no' and the final date of the unit's service life (end of life) are displayed.

This procedure is valid for units manufactured or maintained from 12/2010.

1. display of the flight counter

2. display of the serial number

3. next maintenance possible in 08 / 2023

4. display of the rev. number

4.6 CYPRES 2 and water jumps

The design of the CYPRES 2 allows water jumps without needing to remove the unit. CYPRES 2 is waterproof for up to 15 minutes down to a depth of 15 feet (5 meters) in fresh and saltwater. If the depth is 8 feet (2.5 meters) or less, the unit may remain waterproof for up to 24 hours. This is achieved through a waterproof casing, sealed plug connections, a sealed cutter, a sealed control unit, and a special filter. The filter allows precise measurements of air pressure while keeping water away from the inside of the unit. As long as there is no contact with water, the filter does not need to be replaced by the user.

In the event of contact with water, the unit must be switched off immediately after exiting the water. The filter must be replaced before next use. CYPRES 2 comes with one spare filter and a filter changer. The CYPRES 2 filter changer is made from stainless steel and has been specially designed for filter removal and replacement. Filter replacement (see Section 4.7) can be done by your rigger (packer). After contact with water, the rig and the reserve must be dried according to the manufacturers' instructions. The rig and CYPRES 2 with the new filter can then be used again.

4.7 Changing the filter

⚠CAUTION **The unit must be switched off before changing the filter.**

Filter removal: Hold the CYPRES 2 filter changer by the non-slotted end and push it straight (without tilting) onto the filter up to the stop position.

Tightly grip the filter changer, twist it off by turning it counterclockwise and remove the filter. If there is water in the casing (behind the filter), dry it with a cloth. Remove the old filter from the filter changer by pushing it with your finger or with the eraser end of a pencil. Discard it.

Filter installation: Place the new filter with the labeled side facing, and into, the slotted end of the filter changer up to the stop (flush) position. Do not tilt.

Hold the filter changer by the non-slotted end and gently slide the filter fitting into the unit while holding it straight (without tilting it). Turn the filter changer clockwise - initially there will be little resistance. Continue turning the filter changer until it slips on the filter (the filter stops turning but the changer continues to turn). Remove the filter changer from the filter by pulling it straight back.

⚠CAUTION **Do not use other tools!**

5. Error display

If an error condition is detected during the self-test countdown, CYPRES 2 will show an error code on the display.

1111 or 2222 One or both of the attached release units are not correctly electrically connected to the unit. This could be due to a cable break, the cutter plug could be disconnected, or the release unit(s) may have activated. Check/replace the release unit(s).

3333 Excessive variations in ambient air pressure have been measured during the self-test period. The unit is unable to obtain consistent values for the ambient air pressure at ground level. Possible reasons could be that the user has attempted to switch CYPRES 2 on while driving uphill or downhill in a car, or while in an elevator or in an aircraft in flight.

The switch-on procedure can be repeated several times after a 3333 error has appeared. If 0 appears, the unit's self-test has been successful.

Codes 1-3 are displayed for approx. 2 seconds, then the unit switches itself OFF (display goes blank).

AGE will appear within the last month of the unit's service lifetime and the unit will continue to display this through the future. It will appear for approx. 5 seconds before continuing to 0

7777 low battery. Please contact Airtec or SSK prior to next use.

After one of the following three error codes appears, the unit switches OFF and cannot be switched on again. Please discontinue use and send the unit in for service.

Pdo Power down

CHS Checksum error

PSE Pressure sensor error

If other error codes appear, if the unit switches itself off and cannot be switched on again, if the unit does not switch off after 14 hours, if there is no red light when the button is pressed, or if anything else unusual occurs please record the error code and contact Airtec or SSK before further use.

⚠WARNING

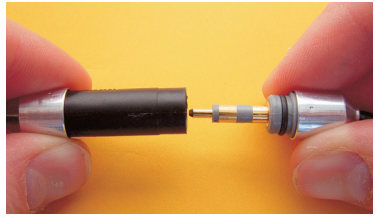
A malfunction can cause a false activation/failure to activate: Any technical device can fail. Every fault imaginable can happen with the CYPRES 2 including, but not limited to: displaying a faulty status, failing to function, or functioning at the wrong moment or in the wrong circumstances. Such a failure could easily injure or kill you or others. If you or your friends or relatives are unwilling to accept these uncertainties and risks you must not use CYPRES 2.

6. Changing the release unit(s)

After an activation the release unit can be changed by any rigger (packer) via the plug-and-socket connection.

Disconnecting the release unit:
Hold the plug and socket by their aluminium grips and pull them apart using a smooth straight motion. Do not twist!

Connecting the release unit(s):
Hold the plug and socket by their aluminium grips. Place the plug directly in front of the socket and connect them by pushing them together with a smooth straight motion until the plug is fully seated. Do not twist!



It is easy to change a 1-pin CYPRES 2 to a 2-pin CYPRES 2 or vice versa by swapping cutter types.

1-pin cutter

2-pin cutter

Notes:

1. Release units (cutters) have a serial number on heat shrink tubing attached to the cable. This number identifies the cutter. A table of cutter numbers with their corresponding dates of manufacture is available at www.cypres.cc.

2. It is possible that the cutter plug may separate from the socket after a CYPRES 2 activation. In the unlikely event of this occurring in combination with a water landing, the socket must be dried out before further use. To do this, tap the open end of the socket onto a flat surface such as a table top. Keep tapping the socket until no more water comes out, then store the CYPRES 2 with the open end of the socket facing down for another 24 hours in a dry area to allow the socket to fully dry out. When completely dry, insert the plug of the new cutter. Never insert an object (such as a Q-tip) to dry out the plug.

3. Use a one-pin cutter in a one-pin container and a two-pin cutter in a two-pin container.

⚠WARNING

Do not use release units (cutters) after the end of the cutter service life (16.5 years after DOM) Used release units (cutters) that are/were attached to a CYPRES unit are also subject to technical servicing/maintenance. See Section 12.1. New release units (cutters) that have never been attached to a CYPRES unit and were in storage (according to the manufacturer's instructions) do NOT need to be sent in for maintenance within the service time frame.

7. Technical servicing/maintenance

CYPRES 2's extremely reliable functioning is attributable to four factors: the exclusive use of carefully pretreated and approved parts, strict and detailed manufacturing procedures, continuous quality control and monitoring throughout the manufacturing process, and regular periodic technical servicing (maintenance). We offer maintenance for four main reasons:

1. Deviations between nominal and actual values are corrected to ideal values. Every detail is observed. Signs of wear and tear are often corrected and sometimes even 'cosmetic' treatment is performed.
2. The technical condition of each unit is analyzed. The fact that a very high percentage of units are returned for periodic maintenance allows us to see statistical trends and predict potential problems at a very early stage. This means that it is often possible to prevent situations by making modifications during the maintenance process, rather than having to fix problems that result in downtime later.
3. Experience has shown that during the period of a maintenance cycle (4 or 5 years), changes and improvements do happen. Applicable updates are performed during maintenance. Such updates may arise from technical improvements or enhanced knowledge or may result from environmental changes or changes in the sport (e.g., new disciplines), which Airtec is always researching and taking into consideration.
4. The most important maintenance element is the individual pre-adjustment of each unit for the next cycle. A unit will not be returned until a high level of confidence is reached in terms of predicting the unit's correct function for the next cycle.

CYPRES 2 offers two scheduled maintenance events within the unit's service life.

7.1 Maintenance reminder

Approaching the beginning of the first maintenance window your CYPRES 2 will start to show you that maintenance is available and the unit will display the proposed month and year (e.g., 

for unit DOM 11/2020). This will happen after the unit is switched on during the self-test between the unit showing

and 

. From the day when this appears you have 13 months to send in the unit and be within the maintenance window.
After these reminders the unit will continue and switch to 

.

Starting time/display duration	Display (DOM 11/2020)
6 months prior to the maintenance date, the beginning of the maintenance window appears for 2 seconds.	
At the maintenance date, this appears for 3 seconds.	
3 months after the maintenance date, this appears for 5 seconds.	
6 months after the maintenance date, the end of the maintenance window appears for 5 seconds.	

If the first maintenance has been performed on your CYPRES 2, then your unit will notify you of the second (and last) maintenance as it approaches the beginning of the second maintenance window. This will happen regardless of when the first maintenance was performed. The reminders are only deactivated during maintenance.
After the second maintenance, your CYPRES 2 should be usable until the end of its service life. For the service life schedule see Section 12.1.
During the service life of a CYPRES 2 unit, the parachutist should not incur any costs of operation other than the two maintenance fees (except for any replacement cutters or waterproof filters that may be required).
Please contact your local CYPRES 2 dealer regarding maintenance. See https://www.cypres.aero/dealers/ or contact Airtec or SSK if you do not know who your local dealer is.

The CYPRES Service Center for the USA, Canada, South America and other countries in the Western Hemisphere is:

SSK Military Industries, Inc.,
1008 Monroe Road
Lebanon, OH 45036 - USA
Tel: ++ 1 513 934 3201
Fax: ++ 1 513 934 3208
email: info@SSK.us
www.SSK.us

⚠WARNING

Reliability: As nothing lasts forever, the longer you use a device without having it thoroughly checked the greater the chance that it does not work properly every time you need it. If you choose not to have maintenance performed on your device you are assuming the risk that it will be less reliable (see Section 12.1 for the CYPRES 2 maintenance/utilization cycle).

7.2 Timing of maintenance

If we receive your unit at our facilities for maintenance from exactly 6 months before the proposed date until 6 months after the proposed date (in other words, within the 13-month maintenance window), our maintenance procedures will be performed using our highly standardized process. This maintenance will be charged at the flat CYPRES maintenance rate, even when a unit requires extensive individual attention.

NOTICE We strongly encourage every CYPRES 2 owner who decides to have their unit maintained to stay within the maintenance windows. Please do not be late, because this will result in higher costs and longer turnaround times.

Due to the significantly greater technical and organizational demands for individual unit processing, a service outside the prescribed maintenance windows may take considerably longer and incur significantly higher costs.

8. Important notes

8.1 Important notes for jump pilots

The following three points are only to be borne in mind when the Military CYPRES 2 unit is used in Training Mode.

- Every Military CYPRES 2 unit must exceed an altitude of at least 1,500 feet above its firing altitude in order to become fully armed.

- Never descend to an altitude below the airfield takeoff 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, or the ramp open slightly until after take-off. Make sure that the cabin pressure cannot build up above the air pressure on the ground (tip: the parachutists' altimeters should never go below "0".)

Always: in Training Mode **and** Operational Mode
Stay below the vertical activation speed in the activation window (6,900 feet/min or 5,700 feet/min for 2500/29/A CYPRES 2) when you are descending.
Please note that a pressurized cabin may influence the air pressure readings of AADs on board.

- When you have a Military CYPRES on board, never exceed 38,000 feet (11,700 m) above sea level.
  When you have a Military CYPRES on board manufactured or maintained 11/2021 and after, never exceed 65,000 feet (20,000 m) above sea level.

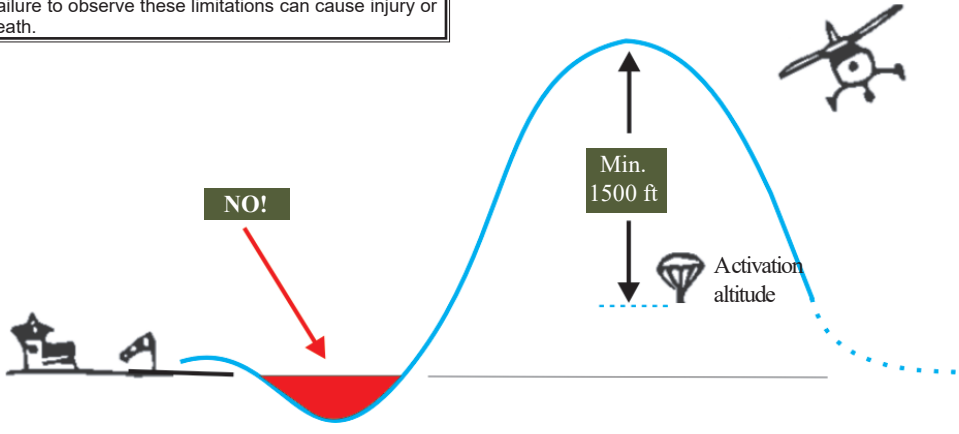
The image below shows what must not be done/should be done when the unit is in Training Mode.

⚠WARNING

Flight limitations in Training Mode:

- Never fly below the airfield takeoff elevation
- Always go at least 1,500 feet above the activation altitude.

Failure to observe these limitations can cause injury or death.



If the Military CYPRES 2 unit is used in Operational Mode the above limitations do not apply.

8.2 Important notes for users

- CYPRES 2 must not be used for parascending or paragliding/-sailing.
- CYPRES 2 cannot be used for base jumps (jumps from fixed objects), and must be switched off prior to making a base jump.
- To make sure that a Military CYPRES 2 unit is armed when it is used in Training Mode, you must fly at least 1,500ft above the preset activation altitude (this is a rule of thumb - exact specifications are available from Airtec/SSK). The Military CYPRES 2 unit is always armed when used in Operational Mode.
- A two-canopy scenario can be caused by a CYPRES activation if the main is deployed too low.
- CYPRES is shielded against radio transmitter signals. We have gone to considerable lengths to protect CYPRES 2 from "radio pollution". Although CYPRES 2's exceptional shielding system has been investigated thoroughly, it is impossible to provide 100% protection. Users are still recommended to avoid strong radio transmitters. Please contact Airtec if you have any questions.
- A release unit that has activated builds up a high level of internal pressure and will remain pressurized. Never attempt to open it by force.
- In Training Mode only: After take-off please ascend at more than 180 feet per minute (1 meter per second) for at least 30 seconds.
- The reserve closing loop must be under tension, caused by the pilot chute spring, of no less than 10 pounds (5 kg approximately).
- A good reserve pilot chute is an important safety factor. On systems with an internally-mounted pilot chute, we recommend that owners equip their rigs with one that has been tested and subsequently qualified by both Airtec and the rig manufacturer. Typically the rig manufacturer delivers these pilot chutes with the rig. If in doubt, please contact Airtec.
- Don't forget: After water contact shut your CYPRES 2 off immediately and change the filter.
- Make sure that the reserve closing loop passes through the cutter's passing hole.
- The maximum allowed altitude for a Military CYPRES is 38,000 feet (11,700 m) above sea level. For Military CYPRES manufactured or maintained 11/2021 and after the maximum allowed altitude is 65,000 feet (20,000 m) above sea level. If you need to exceed these heights just give us a call at Airtec +49 2953 98990

9. Repacking of reserves

The following tips are only brief suggestions. Please contact the harness/container manufacturer for advice and detailed packing instructions for riggers (packers or equivalent) in relation to the CYPRES AAD installation and rigging specifications.

General:

The reserve closing loop must be under tension, caused by the pilot chute spring, of no less than 10 pounds (5 kg approximately).
Please check the grommets closely during each repack.
Grommets with rough edges will ultimately destroy any loop. Replace damaged grommets immediately. Use original CYPRES loops/loop material, pull-ups, and discs when a CYPRES 2 is installed in the container. Even if you do not have an AAD in your container, a CYPRES loop will markedly improve your safety. The use of CYPRES accessories (loops, discs, setups) in combination with AADs from other brands is prohibited as we have not performed any compatibility tests.
LOR loops for Parachute de France rigs are an original PdF spare part and can be purchased only from PdF dealers. Non-adjustable loops that are attached to a CYPRES disc and mounted in containers with an internal pilot chute should be replaced at each repack. Following attachment to the disc, CYPRES loops should be treated with CYPRES loop silicone on no more than the upper 4 cm (1 1/2 inch), but well away from the knot.

The loops provided by Airtec have already been pre-treated with silicone.

1-Pin pop top:

Please check the loop carefully and replace if necessary. Silicone should not be used on all adjustable loops. The adjustment will not remain fixed.

2-Pin pop top:

Please contact the harness/container manufacturer for advice and detailed packing instructions for riggers (packers or equivalent) regarding CYPRES 2 AAD installation and rigging specifications.

Tips for riggers (packers):

The 'Packer's Kit' is available from CYPRES 2 dealers. It contains lots of things to make life easier, including:

1 spool of CYPRES loop material, 1 fingertrapping needle, 1 container of silicone gel, 1 container with siliconized cloth, 2 temporary pins, 5 discs, 1 filter changer, 3 filters, 1 CYPRES User Guide, CYPRES Rigging Tips.

For specific instructions please contact your h/c manufacturer.

SAFETY INSTRUCTIONS

Repack: Please follow your country's requirements with respect to repack cycles and authorizations for reserve pack jobs.

9.1 The CYPRES loop and disk system

Previous reserve closing loops were made from old parachute suspension lines or similar material made of Kevlar, Dacron, Spectra, etc. They were often thick and rough and became stiff while under tension in a packed container for a prolonged period of time. As a result, these loops could delay the reserve container opening or even prevent it after the ripcord was pulled because they became trapped between the grommets.

A number of parachutists died because the reserve flaps did not open in time.

Riggers and packers used normal metal washers to fasten the reserve closing loops at the bottom of the container. Sometimes these washers had sharp edges. A loop that was under a lot of tension in the container could be damaged and cut accidentally by those sharp edges, particularly when coupled with vibration in a car or in an aircraft.

Parachutists were killed by premature reserve openings caused by fraying loops. In one case, an aircraft actually crashed because of a premature reserve opening.

Our intention is to make parachuting safer, so we addressed this issue. In 1991 and 1992 we designed a loop and disc solution to reduce these risks as much as possible.

The CYPRES loop is woven like a tube so it can be inserted into itself to create the closing loop's eye. At the same time it is only 11/16 inch in diameter (1.8 mm), is extremely flexible and has an extra smooth surface to make it extremely slippery. In addition, CYPRES loops are treated with a special silicone on the top 1.5 inches (4 centimeters) to maximize the smoothness of its surface, thereby further reducing the friction.

Although the loop is very narrow, its breaking strength is in excess of 410 lbs (185 kg).

The CYPRES disk washer (often called a smiley due to its appearance) is a round aluminum disk with no sharp edges on its outer contour. It has three holes. The finger-trapped loop is threaded through the middle hole and then through the left hole. The loop then gets threaded through the right hole and knotted.

The three holes have no sharp edges. It is a very complex procedure to manufacture this disc, but loop-tearing has reduced to almost zero by using this product.
There is no doubt that both the loop and washer working together as a system have certainly made parachuting much safer, quite apart from CYPRES itself.

CYPRES loop

- Extremely flexible
- Extremely slippery
- Breaking strength: 408 lbs
- Diameter: 11/16 inch

CYPRES disk

"Smiley"

- no sharp edges
- minimal loop tearing

Since the system was introduced to the parachuting scene in 1992, approximately 1,010,000 disks and around 4,000,000 loops have been manufactured by Airtec and given to rig manufacturers, riggers and packers around the world to improve safety. These days you are unlikely to find a rig worldwide with a reserve container that is not closed using the CYPRES reserve closing loop system.

In addition to achieving its technical purpose inside the reserve container, this CYPRES closing loop system has another advantage: It reduces the necessary pull force on the reserve ripcord handle by up to 50%. This is a huge help for all those parachutists who, for one reason or another, have difficulties with the pull force.

10. Switching rigs

Switching your CYPRES 2 to another CYPRES 2-ready rig will require only a few moments of work for your rigger.

If the container swap requires a change in the number of release units (cutters), this can be done quickly on-site by unplugging the old cutter and swapping it with the required cutter type (1-pin or 2-pin). It is not necessary to send the CYPRES 2 to the manufacturer. The required cutter can be purchased from your CYPRES dealer.

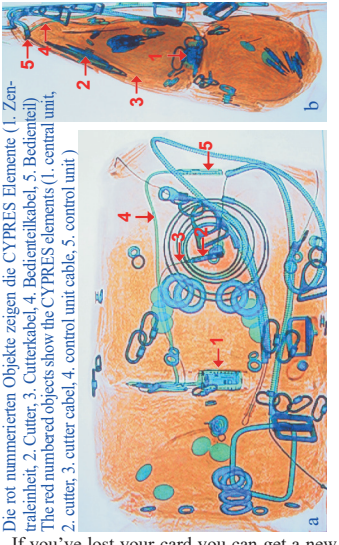
11. Air travel

A CYPRES 2-equipped rig may be transported in freight and passenger aircraft without restrictions. All of its components (e.g., measuring systems, electronics, power supply, loop cutter, control unit, plugs, cables, and casing) as well as the entire system, contain parts and materials that are approved by U.S. DOT and other competent agencies worldwide, and are not subject to any transport regulations.

Given the size of a rig we recommend that it be checked in as normal luggage and not taken on board as hand luggage. Should your rig prompt any queries or objections from security personnel, please use the card shown on the right which you'll find in the back cover of this book. It shows an x-ray of a complete rig fitted with CYPRES 2. The x-ray imagery may vary depending on the type and design of the rig.

The Parachute Industry Association and the USPA have worked with the Transportation Security Agency in relation to traveling with parachutes.

Please refer to USPA's website (www.USPA.org) for the latest documents and recommendations.



Original card located in the back cover

If you've lost your card you can get a new one from Airtec or SSK.

12. Technical data

Technical data for all Military CYPRES 2:

Length, width, height of the processing unit.....approx. 3 1/3 x 2 2/3 x 1 1/4 inches (85 x 43 x 32 mm)
Length, width, height of the control unit .....approx. 2 1/2 x 3/4 x 1/4 inches (65 x 18 x 6.5 mm)
Length, diameter of the release unit.....approx. 1 5/8 x 3/8 inches (43 x 8.0 mm)
Cable length of the control unit .....approx. 47 1/3 inches (1200 mm)
Cable length of the release unit.....approx. 20 inches (500 mm)
Volume ..... 9.15 cubic inches (150 cm³)
Weight .....8.18 ounces (232 grams)
Storage temperature ..... +160° F to -58° F (+ 71° to - 50° centigrade)
Storage pressure ..... 200 to 1094 hPa (approx. - 2140 to + 38633 feet MSL)
Working temperature..... +145° F to -25° F * (+ 63° to - 32° centigrade*)
Maximum allowable humidity.....up to 99.9% rel. humidity
Waterproof IP68.... up to 15 minutes down to a depth of 15 feet (up to 24 hours down to a depth of 8 feet)
Target DZ can be programmed between..... 200 to 1094 hPa (approx. - 2,140 to + 38,000 feet MSL)
Operating range for units manufactured prior to 11/2021 ..... - 2,140 feet to + 38,000 feet MSL
.....(-650 m to +11,700 m)
Operating range for units manufactured or maintained 11/2021 and after....- 2,140 feet to + 65,000 feet MSL
..... (-650 m to +20,000 m)
Functioning duration..... 14 hours
Power supply..... service life warranty**
Maintenance..... see Section 12.1
Total service life.....see Section 12.1

* These temperature limits do not refer to outside (ambient) temperatures but rather to temperatures inside the processing unit. These limits are therefore not relevant until the processing unit itself has reached the temperatures in question. In reality, these limits will rarely be reached due to the fact that CYPRES 2 must be located inside the reserve container, and due to the insulating properties of the processing unit pouch and parachute canopy.

Standard settings for the 1000/35 A CYPRES 2:
Activation altitude .....approx. 1,000 feet
Activation speed.....approx. 78 mph at sea level

Standard settings for the 1500/35 A CYPRES 2:
Activation altitude .....approx. 1,500 feet
Activation speed.....approx. 78 mph at sea level

Standard settings for the 1900/35 A CYPRES 2:
Activation altitude .....approx. 1,900 feet
Activation speed.....approx. 78 mph at sea level

Standard settings for the 2500/29 A CYPRES 2:
Activation altitude.....approx. 2,500 feet
Activation speed.....approx. 65 mph at sea level

Standard settings for the 2500/35 A CYPRES 2:
Activation altitude.....approx. 2,500 feet
Activation speed.....approx. 78 mph at sea level

Standard settings for the Changeable MODE Mil CYPRES 2:
Activation altitude.....according to set MODE
Activation speed.....according to set MODE

12.1 Versions

For units with a DOM of 12/15 and earlier, maintenance is mandatory 4 and 8 years after the original DOM. The service life of these units is 12.5 years.***
For units manufactured in 2016, maintenance can be performed on a voluntary basis 4 and 8 years after the original DOM. The service life of these units is 12.5 years.***
For units with a DOM of 01/17 and later the maintenance can be performed on a voluntary basis 5 and 10 years after the original DOM. The service life of these units is 15.5 years.***

** If maintenance has been performed.
*** Based on currently available information.

13. Warranty

Airtec GmbH & Co. KG grants the legally prescribed warranty of two years. Provided it is technically possible and economically justifiable, we intend to carry out repairs free of charge on a voluntary basis for a further three years for all non-intentional or non-negligent damage.

Provided it is technically feasible and economically justifiable, and the affected device has been regularly maintained on schedule, Airtec will thereafter, at its sole discretion, consider repair or replacement free of charge for all non-intentional or non-negligent damage. This has been a long-standing Airtec practice since 1991.

The manufacturer reserves the right to decide whether the unit will be repaired or replaced. Neither repair nor replacement will affect the original warranty.

When a CYPRES 2 unit is returned to the manufacturer or service center, it must be packed in the original box or an equivalent shipping package including a fully completed service form/proper documentation for billing purposes, return shipping information, contact information, and any other relevant notes.

No claims will be accepted if the unit has been damaged or opened by an unauthorized individual or if an attempt has been made to open the processing unit, release unit (cutter) or control unit.

14. Disclaimer

In designing and manufacturing CYPRES 2, the aim of Airtec GmbH & Co. KG Safety Systems is that the device should not accidentally sever the reserve closing loop, but that the device should attempt to sever the reserve closing loop when the activation criteria are met.

All investigations and experiments performed during the product's development and all laboratory and field tests accompanying the device's trial and production phases have indicated that CYPRES 2 meets both of these goals.

However, as an electromechanical device the possibility of CYPRES 2 malfunctioning cannot be excluded. Such a malfunction may cause injury or death. We accept no responsibility for any damage or loss resulting from any malfunction.

Airtec GmbH & Co. KG Safety Systems also accepts no responsibility for any damage or problems caused by the use of non-original Airtec parts and accessories. In conjunction with persons parachutes, all spare parts and components of the device are to be used exclusively with a CYPRES AAD. They are not permitted to be used with any non-CYPRES device.

The use of CYPRES 2 is voluntary and does not automatically prevent injury or death. Risk can be reduced by ensuring that each component has been installed in strict compliance with the manufacturer's instructions, by obtaining proper instruction in the use of this system, and by operating each component of the system in strict compliance with this User Guide. If used in the USA, CYPRES 2 shall be used in accordance with USPA BSRs.

Automatic activation devices (AADs) sometimes display an incorrect status, fail to operate or fail to operate properly, and activate when they should not, even when properly installed and operated. The user therefore risks serious injury or even death to themselves and others during each use.

By using or allowing others to use CYPRES 2, you acknowledge that you accept responsibility for the proper use of this device, as well as accepting the consequences of any and all use of this device.

The sole and complete responsibility of Airtec GmbH & Co. KG Safety Systems, its dealers, service centers and agents is limited to the repair or replacement of any defective device.

CYPRES 2 is strictly a backup device and is not intended to replace proper training or timely execution of appropriate emergency procedures. If you, your friends or family do not agree to these disclaimers please do not use CYPRES 2.

15. Index

16. Packing list

In addition to the CYPRES 2 unit and the User Guide, the following items will be delivered:

- Military CYPRES 2
- Military CYPRES 2 User Guide
- Spare CYPRES 2 filter
- CYPRES 2 filter changer
- Test certificate

If applicable:
- CYPRES closing loop(s)
- CYPRES disc(s)
- pull-up cord(s)
- soft bodkin(s)

Trademarks

CYPRES is the abbreviation of **CY**bernetic **P**arachute **RE**lease **S**ystem.

Cybernetic is an historic Greek word which means "self regulating".

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CYPRES 2

Reliability made in Germany

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