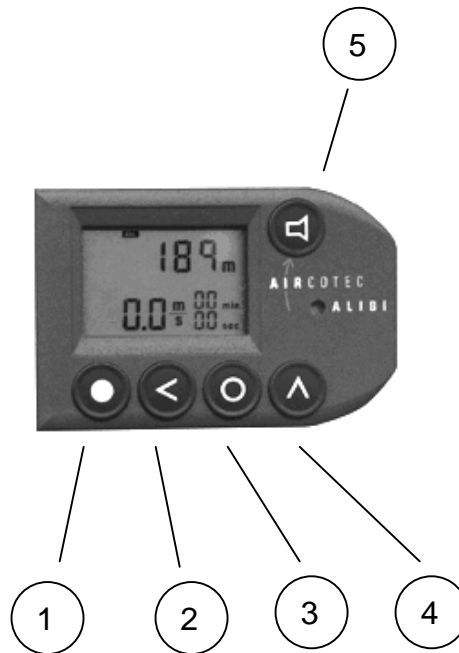# Operating Instruction Aircotec Alibi

SWITCH POWER ON:

Press (1) until the liquid crystal display appears.
All segments show up briefly, followed by the instrument serial number (upper number) and battery voltage (lower number).
Shortly thereafter it switches to the operational mode. — To reach the operational mode directly, press (1) a second time.

SWITCH POWER 0FF:

Push (1) until the LCD is turned off.
ALIBI switches off automatically at rest, i.e. if there has been no vario activity for 15 minutes
and if stop-watch is tuning and if installed at a balloon it switches off after 2 hours.

NOTE: Allow a reset time of at least 3 seconds to pass before switching ALIBI on again after it was switched off!

BATTERY CHECK:

The battery voltage is displayed every time the instrument is turned on.
The battery symbol flashes if the voltage is less than 8 volts. A new battery should be installed as soon as possible.
Instrument performance becomes erratic at about 6,5 volts.

BATTERY EXCHANGE:

Observe proper polarity, as a reversed battery can not be inserted.

NOTE:
Make sure to purchase batteries of the correct dimensions, because they can very in size! Do not attempt to install a battery
of incorrect dimensions. NiCads may be used, but their capacity is much lower than that of alkaline batteries.

SWITCH BETWEEN „METERS" AND „FEET":

Briefly press (2) and (3) simultaneously.

SWITCH BETWEEN ABSOLUTE ALTITUDE, DIFFERENTIAL ALTITUDE, AND BAROSET QNH:

Briefly press (3) to cycle through these modes.

ADJUSTING BAROSET (QNH) ABSOLUTE ALTITUDE, AND DIFFERENTIAL ALTITUDE:

The baroset QNH range is 970 hPa to 1 050 hPa. The instrument automatically assumes the corresponding range limit value, if an attempt is made to enter a higher or lower value.
Please note, that in the „feet" mode the display changes in steps of either, 3 ft or 4 ft, because the actual measurements are made in meters and later converted into fest.
Absolute altitude is the altitude above sea level. It can be set either directly or via baroset QNH. Here again the instrument adjusts automatically to the range limit value, if one attempts to set an absolute altitude outside the instruments range!
Changing the absolute altitude changes as well the differential altitude by the same amount.
The differential altitude is the altitude above a selected reference level, e.g. above launch or above the landing zone. It can be set to any desired value. In order to set it on zero, press (4) until the display shows zero. Changing numerals and sign is accomplished by the following procedure: — Briefly press (2) to get into the adjustment mode, denoted by a flashing display. The sign can now be changed by pressing (4) before setting an altitude. Press (2) and change the last digit with (4). All other digits are changed sequentially by similarly using (2) and (4). The adjustment is finalized, and the new value accepted, by pressing (3).

TEMPORARY ALTITUDE:

Temporary altitude displays the attitude change over a selected time interval. It is a useful feature to frequently check short-term altitude gains in thermal lift. Briefly press (4). The display shows zero and the indicator „Diff." flashes.
Terminate the measurement by again pressing (4).

AIRCOTEC SIGNAL ACDUSTIC:

The AIRCOTEC Signal Acoustic indicates the climb rate with a continuous tone, whose frequency increases with increasing rate of ascent. An expanded frequency scale below 1 m/s assures optimized trend recognition. which is especially useful in light thermals. Short tone bursts are superimposed onto the continuous tone in order to indicate fixed climb rate levels. Up to 5 m/s a 4 kHz burst occurs for each 0.5 m/s step.
Up to 8 m/s a 1 kHz burst occurs at 1 *m/s* intervals. 5 m/s steps are indicated by a longer 800 Hz burst.
In the „feet" mode, a 1 kHz burst occurs at steps of 100 fpm, and an extended 800 Hz burst at intervals of 500 fpm, up to a maximum rate of 1400 fpm.
Rate changes of more than 0.5 m/s (100 fpm) are signaled within 3 seconds at the latest.
If the rate stays constant, the update occurs only every 15 seconds.
Sink rates are communicated with the same burst signals as climb rates.

INTERVAL ACOUSTIC:

This is the common vario beeper. sounding a tone with rate-dependent interval frequency and pitch. The tone becomes continuous above 5 m/s (1000 fpm).

AUDIO:

(5) handles all audio functions (on/off and volume), and it toggles the vario between the signal acoustic and the interval acoustic modes. It confirms the latest setting as follows:

Audio oft	short beep
Volume 1	low continuous tone while pressing (5)
Volume 2	loud continuous tone while pressing (5)
Signal Acoustic	continuous tone
Interval Acoustic	intermittent tone

Repeated pressing of (5) (within one second) steps it through its ranges in the sequence
,,volume 1 — volume 2 — oft — volume 1…..''
After quickly pressing (5) four times one has returned to the previous range,
but one has toggled between signal acoustic and interval acoustic.

SWITCH BETWEEN INTERVAL ACOUSTIC AND AIRCOTEC SIGNAL ACOUSTIC:

As described under AUDIO above.

STOPWATCH:

Assuming the instrument is turned on, briefly press (1). Time zero is flashing in the ,,ready' state. Press (1) again briefly immediately before launch, and the stopwatch is running. The indicator ,,Stop'' flashes. Briefly press (1) again to stop the timer. During the first hour the elapsed time is displayed in seconds and minutes, thereafter in minutes and hours. **Stopped times above 2 minutes are placed into memory.**

RECALL OF PEAK VALUES:

Press (3) and (4) simultaneously to display duration, maximum altitude, and peak climb rate of the last flight. Briefly press (3), and the longest duration, the highest altitude, and the peak climb rate of all previous flights will be shown.
Return to the operational mode by briefly pressing (3), or automatically after a short time.

DISPLAY TEMPERATURE:

Press (3) continuously until the temperature is displayed.
The interior instrument temperature will be shown for a few seconds.

BAROMETER READING:

If the instrument is set for the absolute altitude of the current position and switched into the baroset mode (QNH), it will display the actual barometric pressure in hPa.

CHANGE VARIO SENSITIVITY AND SINK ALARM:

Press (2) continuously until the vario display flashes. Set the sensitivity with (4) within a range of + 0.5 *m/s* to — 2 *m/s.*
Briefly press (2), then Set with (4) the sink alarm threshold within a range between — 1 m/s and — *6* m/s.
Adjust the audio volume by pressing (5) until the desired level is reached. — Return to the operational mode by pressing (3).

ERASING PEAK VALUE MEMORY:

Press (3) and (4) simultaneously as in ,,Recall'' above, the press (3) continuously for about 30 seconds until all displayed numbers are zero.

SUMMARY:

Operating ALIBI will be simple, if you remember the following:

(1)   power on/off; stopwatch
(2)   initiate baroset and altitude adjustments; select numerals to be changed.
(3)   all switching, incl. temperature.
(4)   change sign and set numerals; zero differential altitude; on/off for temporary altitude.
(5)   audio on/off and volume; toggle between vario modes

If ALIBI doesn't react while pushing bottom, it might have the following reasons:

1.   reset too fast (before 3 sec.)
2.   battery power below 6 V
In case 1 put out battery for at least 5 sec.
In case 2 put in a new battery.

ALIBI is shipped to you with the following settings:

mode: hang glider/paraglider;
units: meters;
audio: Aircotec Signal Acoustic;
vario sensitivity: + 0.1 *m/s;*
sink alarm: 5 m/s;
audio volume: low.
These settings can be changed easily to fit your specific requirements from the following procedures:

MOUNTING:

The universal mounting fixture makes it easy to attach ALIBI in many ways to the flying equipment (down tubes, control bar, etc.) or to the body (arm, thigh, etc.).
Both, the mounting bracket and the hook & loop tape, can be rotated to fit any desired position. Cut the hook & loop tape to fit your needs.

SWITCH BETWEEN MODES FOR HANG GLIDERS/PARAGLIDERS AND PARACHUTE DR BALLOON:

Continuously press (2) and (4) simultaneously until the parachute symbol appears on the display.
Repeat, until the balloon symbol becomes visible.
To revert back to the hang glider/paraglider mode, repeat again until the balloon symbol disappears.
Briefly pressing (2) and <4) simultaneously reveals, which mode is active.

NOTE:

Climb and sink tones are reversed in the balloon mode; in the parachute mode the chute opening altitude tone, adjustable with (5), replaces the vario signal.

You found all News, Instruments, Accessories, Manuals and Software on our Website: www.aircotec.ch