PHOTO **DANIEL ANGULO**

TACTICAL ALTIMETERS



ECHO 3™ MANUAL

CE

WARNING

This product is only for professional use.

The ECHO 3™, even when used as your primary means of maintaining altitude awareness, may fail. Always use your eyes to determine your approximate altitude.

Altimeters may give erroneous readings if you are tumbling or the altimeter is in a burble (wake). Chest mount altimeters are more vulnerable to this problem compared to hand/ wrist mounted altimeters. If you are in doubt about how this limitation affects your skydiving, consult a licensed instructor.

DO NOT use this equipment unless you are currently participating in, or have successfully passed, an approved parachuting or freefall course.

Please read ALL instructions carefully prior to use.

The ECHO 3™ must be switched ON prior to entering the airplane.

ECHO 3™ is a trademark of LB Altimeters, Denmark

LB Altimeters operates a policy of continuous development.
Therefore, we reserve the right to make changes and improvements to any of the products described in this guide without prior notice.

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INTRODUCTION

The ECHO 3™ is the most high-end, accurate, and reliable tactical audible altimeter developed by LB Altimeters to date. The ECHO 3™ software includes second-to-none error correction to ensure correct live altitude readings in any application.

Features

- Audible altimeter
- 4 climb to altitude warnings
- 4 high speed warnings
- 4 low speed warnings
- 3 preset memory banks for quick User change
- Large high contrast, non-flicker, LCD display
- Waterproof and shock resistant aluminum casing with hardened glass
- Quick buttons for access to primary functions
- IR access functionality, to use with optional ALTISET II™ Remote Control

Functions

- Calibration to the local elevation
- Integration Port for external speaker and third-party communication systems support
- User selection of feet / meter
- User selection of pre-set Modes:
  - Tandem
  - Student
  - Expert
- User setting of warnings
- Optional: Super User setting to ACCESS warnings

DESCRIPTION

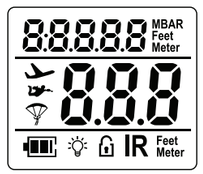
1 Altitude Offset / Up
2 Main
3 Backlight / Down
4 Display
5 Battery cover
6 Reset button
7 IR port
8 LEDs
9 Integration port



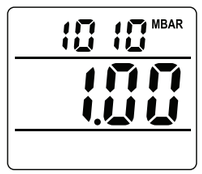
DISPLAY

Startup

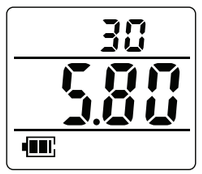
When turning on ECHO 3™, the unit will display the following during the startup self-test.



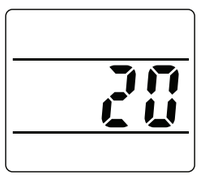
Full display



Air pressure reading (mbar)
Firmware version



Temperature (Celcius)
Battery voltage (V)



Self-test control number

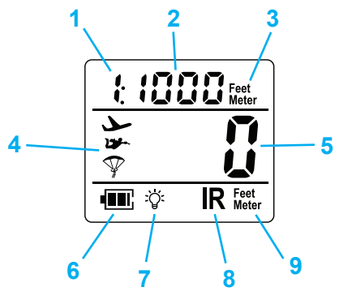


LED lights on test

Main window

The main window is the default window after the unit is turned ON, and starting point for any further actions

1 Warning number (flashing)
2 Warning altitude
3 Feet / meter indicator – Warning altitude
4 Warning type
5 Altitude display (flashing when negative)
6 Battery indicator
7 Backlight indicator
8 IR Mode indicator
9 Feet / meter indicator – Altitude display



Jump Mode LED

1 of 3 colored LEDs will flash below the main window to display the current Jump Mode (while LED setting is ON):

Warning Type

The icon will show the selected warning type for display and settings:

- Climb to Altitude warning
- High Speed warning
- Low Speed warning

Warning Display

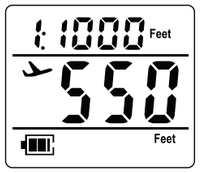
All warnings can be displayed in the top 3rd of the main window by using Quick Buttons to scroll.

Settings / Warning Settings

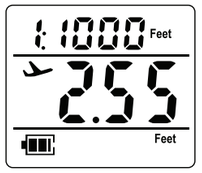
See “Settings / Warnings Settings” sections for display examples and more information.

Altitude window

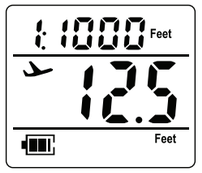
Shortly after take-off, the ECHO 3™ will enter Flight Mode. The main window will automatically display the current altitude when entering Flight Mode.The displayed altitude increments (feet / meter) depend on the current altitude.



0-990
Altitude display: normal
Increments of 10 feet / 5 meters



1.000-9.990
Altitude display: 10s
Increments of 10 feet / 10 meters



10.000 and above
Altitude display: 100s
Increments of 100 feet / 100 meters

Battery Indicator

The battery indicator shows the current battery status.

- Full capacity: Two black bars are shown inside the battery symbol
- Half capacity: One black bar is shown inside the battery symbol
- Low capacity: The battery symbol is empty. The batteries must be replaced as soon as possible
- Empty: The battery symbol is flashing. Do not continue jumping. Replace batteries immediately

Warning: **Do not** perform night jumps, or jumps in sub-zero temperatures (Celsius), when the battery symbol shows low capacity.

WARNINGS

The ECHO 3™ has 3 different types of audible warnings:

Climb to Altitude Warning

While climbing in the aircraft, each preset warning will sound a series of beeps starting at the lowest preset altitude. Up to 4 different warnings can be preset (factory setting being 1 warning at 1000 ft. / 300 m);

1st warning:
2nd warning: One 0.2 second beep
3rd warning: Two 0.2 second beeps
4th warning: One 1.3 second beep

The 1st warning will also:
- Verify functionality of the ECHO 3™
- Indicate the altitude at which the highest preset High Speed warning sounds (one beep per 1000 ft., followed by a pause and another beep if preset an additional 500 ft.)

High Speed Warning

During a vertical descent with speed over of 13 m/sec, each preset warning will sound a series of beeps as follows

Up to 4 different warnings can be preset;
1st warning: One 1.5 second alarm. (Pulsating, low repetition)
2nd warning: One 3 second alarm. (Pulsating, low repetition)
3rd warning: One 4 second alarm. (Pulsating, high repetition)
4th warning: One continuous siren. (High pitch siren, continuous while vertical speed is over 13 m/sec)

Note: After ECHO 3™ registers deployment, a vertical descent with speed over of 35 m/sec must be reached before High Speed Alarms activate.

Low Speed Warning

During descent, each preset warning will sound a series of beeps starting at the highest set altitude.

Up to 4 different warnings can be preset;

1st warning: One 0.2 second beep
2nd warning: One 0.2 second beep
3rd warning: Two 0.2 second beeps
4th warning: One 1.3 second beep

Note: When selecting Guide ON, a series of 5 beeps will 'count down' from the 3rd to the 4th warning. The time between the beeps will shorten as the 4th warning is approached.

Disable Warning(s)

Less than 4 warnings can be selected for each type, by setting 2 or more alarms to the same altitude or zero '----':

Climb to Altitude Warning:
1 warning set to '----': 1st, 2nd, and 3rd warnings will be used
2 warnings set to '----': 1st and 2nd warnings will be used
3 warnings set to '----': 1st warning only will be used

High Speed Warning and Low Speed Warning:
1 warning set to '----': 2nd, 3rd, and 4th warnings will be used
2 warnings set to '----': 3rd, and 4th warnings will be used
3 warnings set to '----': 4th warning only will be used

Note: To re-enable any warning, select an altitude above zero.

JUMP MODE and MEMORY BANK

ECHO 3™ has 3 color coded Jump Modes, each with a Memory Bank:

Yellow / Student
Blue / Tandem
Red / Expert

The Memory Bank contains 4 Climb to Altitude warnings, 4 High Speed warnings, and 4 Low Speed warnings. All Memory Banks are stored on ECHO 3™ while switching Jump Mode.

Integration Port

The ECHO 3™ features an integration port located on the left side of the unit. This port supports the use of the LB External Speaker (sold separately) and enables integration with third-party communication systems.

For a list of compatible systems, visit www.LBAltimeters.com





Speaker sold separately

MENU OVERVIEW

The ECHO 3™ menu system consists of 3 separate areas, which include the following (use road map for reference).

Quick Buttons

- Turn ON unit
- Altitude Offset
- IR Mode
- Backlight
- Warning Display

Settings

- Mode
- LED ON / OFF
- Scroll ON / OFF
- Units - Altitude
- Sound Pitch
- Sound Test
- Guide ON / OFF
- Guide Test
- OFF
- ACCESS to Warning Settings

Warning Settings

- Climb Warnings
- High Speed Warnings
- Low Speed Warnings
- Super User Lock

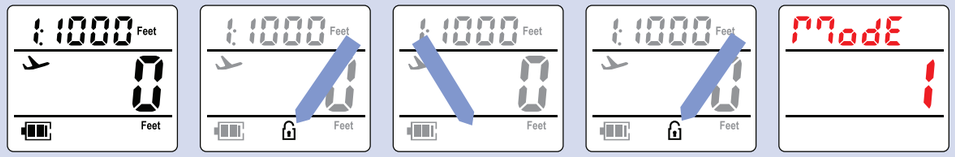
PERFORMING ACCESS

In order to access each of the individual areas, the following steps must be performed from the main window (use road map for reference).

Quick Buttons

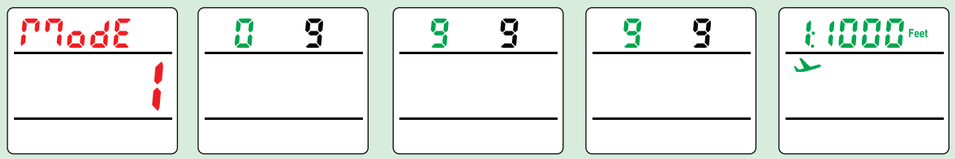
Press and hold the designated button for 3 seconds.

Performing ACCESS to Settings



Press and release ▪ | When the lock icon appears, press and hold ▪ | Continue holding ▪, the lock icon will disappear | When the lock icon reappears, release ▪ | Logbook and Jump Info window

Performing ACCESS to Warning Settings



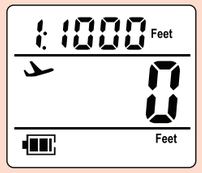
Perform ACCESS to Settings | Press ▪ to scroll until ACCESS window | Use ◂ and ▸ to match left number to the number 9 (default) | Press ▪ | Warning Settings window

QUICK BUTTONS

Quick Buttons are accessible from the Main Window and do not require ACCESS.

Turn the unit on

Turn on the ECHO 3™ on the ground before use. The unit runs a self-test and calibrates to the current ground level. The ECHO 3™ will stay on for 14 hours after the last jump or after last ACCESS performed.



With the unit off, press and hold any button for 5 seconds.

If ECHO 3™ is turned on during flight, the present altitude must be adjusted manually.

Calibration at Startup

Barometric altimeters require ground calibration to ensure accurate altitude readings.

This is typically done automatically when the altimeter is switched on at ground level, using the local QFE (pressure at **Take Off zone**).

Switching On in Flight – Unpressurized Aircraft

If the altimeter is turned on while already in flight, it will lack a ground reference for calibration. To ensure accuracy, you must manually adjust the altimeter by either:

Setting an altitude offset in Feet/Meter correct compared to the **Target DZ**.

Entering the correct QFE value (mBar) for the **Target DZ** (Either on the altimeter itself or through the ALTISET II™).

Switching On in Flight – Pressurized Aircraft

If the altimeter is switched on during flight in a pressurized aircraft, it will also lack a ground reference for calibration.

To ensure accurate readings, you must manually enter the correct QFE value for the **Target DZ** (either on the altimeter itself or through the ALTISET II™).

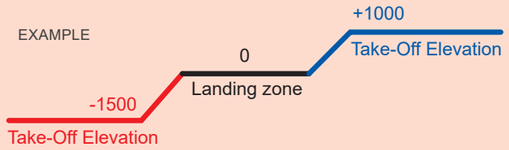
Altitude Offset

Use Altitude Offset to adjust for altitude difference between landing zone and take-off elevation.

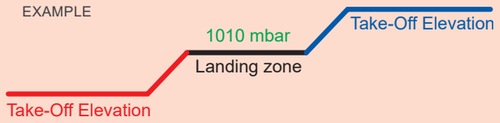
To ensure proper ground reference on landing zone:

Select a positive offset, if take-off elevation is HIGHER than the landing zone.

Select a negative offset, if take-off elevation is LOWER than the landing zone.



Alternatively enter the absolute air pressure for the landing zone. Select the mbar value registered/calculated for the landing zone.

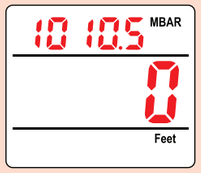


Press and hold ◥ for 5 seconds.

The altitude will begin flashing in the main window and the barometric pressure will be displayed on the top line.

Press ◤ to increase altitude. Press ◥ to reduce altitude.

Press ▪ to confirm Altitude Offset setting. The Altitude Offset will now be displayed in the main window (flashing when negative). Altitude Offset **must** be confirmed within 15 seconds following an altitude change. Altitude Offset is cancelled if no button is pressed within 15 seconds.



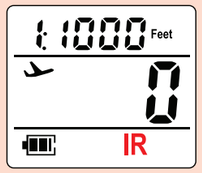
Note: If using Altitude Offset during flight use the aircraft altimeter for reference, or enter the absolute air pressure for the landing zone.

IR Mode

Activate/Deactivate IR Mode for communication with ALTISET II™ remote control.

Press and hold ▪ for 5 seconds.

IR will flash and IR mode is active for 2 minutes.



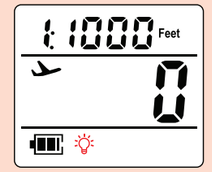
Activate IR Mode on ALTISET II™. Point the ALTISET II™ at the IR port. ALFA™ adjusts to the ALTISET II™ preset altitude and/or backlight.

Press ▪ to exit IR mode.

Note: Refer to the ALTISET II™ manual for more information on using the ALTISET II™ remote control.

Backlight

☼ indicates if the backlight is on or off.



To enable/disable the backlight, press and hold ◥ for 5 seconds.

The backlight will turn off automatically after 10 minutes, if ECHO 3™ is not in Flight Mode. The backlight will remain on while ECHO 3™ is in Flight Mode.

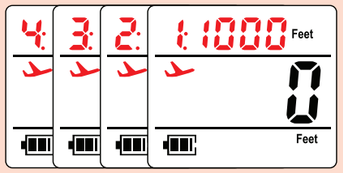
Note: If an Altitude Offset is present, the backlight will stay on until the Altitude Offset is cleared by a jump, times out (14 hours), or the unit is restarted.

Warnings Display

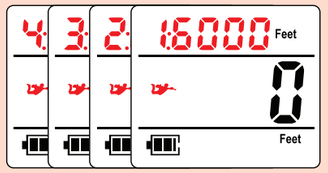
In the Main Window the Warnings can be scrolled through manually, or automatically.

The Warning number and set altitude will be displayed in the top section of the LCD screen, separated by a colon.

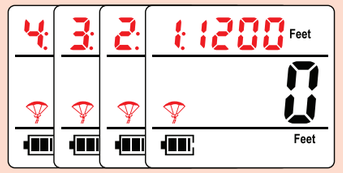
Press ◤ to select previous Warning.
Press ◥ to select next Warning.



Climb to Altitude Warnings



High Speed Warnings



Low Speed Warnings

Note: The flashing LED will show the current Jump Mode selected.

SETTINGS

Settings are used to customize the ECHO 3™.

Perform ACCESS to enter the first entry of Settings.

Press ▪ to scroll through all settings.

ECHO 3™ will exit Setting if no button is pressed within 15 seconds after ACCESS.

Jump Mode

Sets the current Jump Mode.

1: Yellow / Student
2: Blue / Tandem
3: Red / Expert



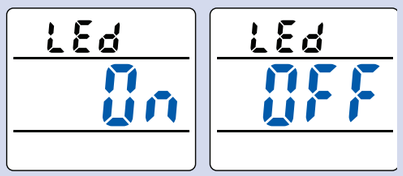
Press ◀ to select previous Jump Mode.
Press ▶ to select next Jump Mode.

The LED will light up to display the selection made.

Press ▪ to continue.

LED On / Off

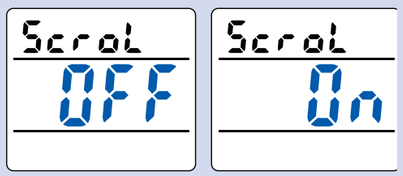
Will activate or deactivate the LED for displaying Jump Mode.



Press ◀ or ▶ to switch LED on or off.
Press ▪ to continue.

Scroll On / Off

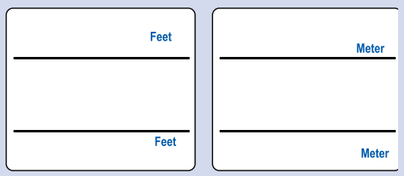
Will activate or deactivate the Scroll setting for Warnings in the Main Window.



Press ◀ or ▶ to switch scroll on or off.
Press ▪ to continue.

Altitude Units

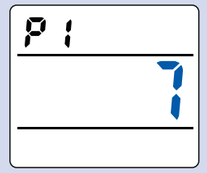
Sets altitude display in either feet or meters.



Press ◀ or ▶ to switch units.
Press ▪ to continue.

Pitch

Change the pitch of the Warning audible sounds.



Press ◀ to increase the pitch.
Press ▶ to decrease the pitch.
Press ▪ to continue.

Sound Test

Will test the High Speed Warnings by sounding each one in succession.

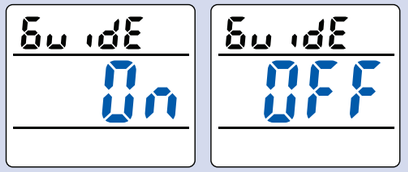


Press ◀ or ▶ to start the sound test.
Press ▪ to continue.

Note: The Warning Altitude will display at the top of the window during the test.

Guide On / Off

Will activate or deactivate the Guide for Low Speed Warnings.



Press ◀ or ▶ to switch Guide on / off.
Press ▪ to continue.

Guide Test

Will test the Guide for Low Speed Warnings.

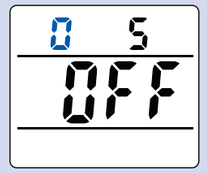


Press ◀ or ▶ to start sound test.
Press ▪ to continue.

Note: The Warning Altitude will display at the top of the window during the test.

Turn Off

Turns the ECHO 3™ off.



To avoid unintentionally turning the ECHO 3™ off, the counter at the top of the screen must be set to ‘5’.

Use ◀ and ▶ to match the counter to ‘5’.
Press ▪ to turn the unit off.

Warning: If the counter is set at ‘5’, ▪ cannot be used to scroll through settings and will turn ECHO 3™ off.
Press ▪ to continue.

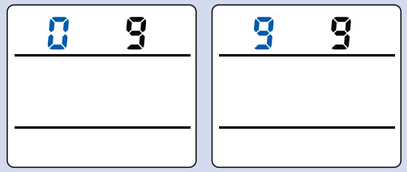
ACCESS to Warning Settings

Performs ACCESS to Warning Settings.

Use ◀ and ▶ to match the left number to '9' (default).
Press ● to accept.

Warning: If '--' is displayed on the right side, the default number has been changed and the unit is locked for Super User only. ACCESS can only be performed matching the left number to the correct hidden number.

Press ● to continue.



Exit Settings

🔓 is flashing.

Press ◀ or ▶ to exit from Settings.
Press ● to start again from the beginning.



WARNING SETTINGS

Settings are used to customize the ECHO 3™ audible warnings.

Perform ACCESS to enter the first entry of **Settings**.

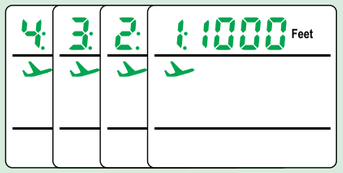
Perform ACCESS to enter the first entry of **Warning Settings**.

Press ● to scroll through all warnings for the selected jump mode.

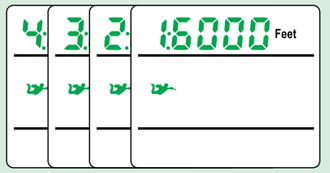
ECHO 3™ will exit Warnings Settings if no button is pressed within 15 seconds after performing ACCESS.

Select Warning

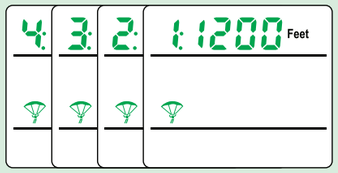
Press ● to scroll through all Warnings for the selected Jump Mode, starting with 1st Climb to Altitude Warning. The Warning number and altitude will be displayed in the top section of the LCD screen, separated by a colon.



Climb to Altitude Warnings



High Speed Warnings



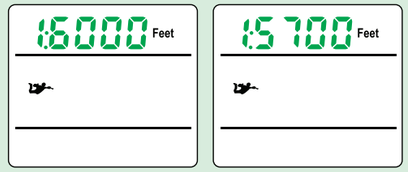
Low Speed Warnings

Note: The LED will show the current Jump Mode selected.

Change Altitude

Change the altitude of the selected Warning.

Press ◀ to increase the altitude.
Press ▶ to decrease the altitude.
Press ● to continue.



ECHO 3™ automatically sort the entered altitudes in order:

Climb to Altitude: 1st Warning will be lowest altitude, 4th Warning will be highest altitude
High Speed Warning: 1st Warning will be highest altitude, 4th Warning will be lowest altitude
Low Speed Warning: 1st Warning will be highest altitude, 4th Warning will be lowest altitude

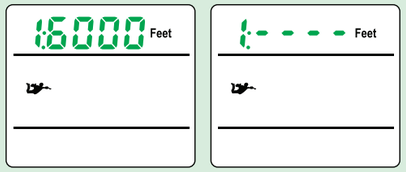
Note: If same altitude is selected as an existing Warning of same type, the Warning will be disabled.

Disable Warning

Will disable the warning.

Press ◀ to decrease the altitude to zero '----'.
Press ● to confirm altitude and continue.

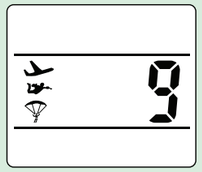
Note: To re-enable any Warning, select an altitude above zero.



ACCESS Code

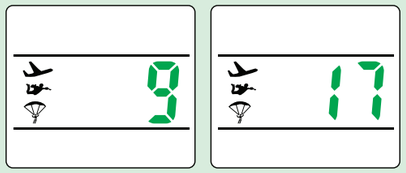
Sets hidden ACCESS code for Warnings Settings menu.

Press ● to cycle through all Warnings until the ACCESS code window.
Press ◀ or ▶ to change ACCESS code.
Press ● to confirm and continue.



Warning: If any other number is selected other than '9' (default), the unit is locked for Super User only and '--' will be displayed in the Settings window when performing ACCESS.

ACCESS can only be performed matching the left number to the correct hidden number.



Note: To reset ACCESS code to '9' (default), a factory reset must be performed.

Exit Settings

🔓 is flashing.

Allows manual exit from Warning Settings

Press ◀ or ▶ to exit from Warning Settings.
Press ● to start from 1st Climb to Altitude Warning.



FUNCTIONALITY

Automatic Calibration / Flight Mode

After the ECHO 3™ is turned on, it will continue to automatically calibrate itself to the field elevation where it is currently located. This will continue after each jump / landing, to ensure the unit is always zeroed before jumps are made and will take into account weather related pressure changes.

Shortly after take-off, the ECHO 3™ will enter Flight Mode. The main window will automatically display the current altitude when entering Flight Mode. At the lowest "Climb to Altitude" warning the ECHO 3™ sounds a sequence of beeps further indicating the ECHO 3™ is in Flight Mode. See "Climb to Altitude Warning" for further explanation.

Altitude Offset

When performing Altitude Offset, the ECHO 3™ enters Flight Mode and will retain any offset for 14 hours if no jump is made. After 14 hours the unit calibrates itself to the field elevation where it is located.

To exit Flight Mode, turn the unit off, then on.

Manual Zeroing

If the unit does not display the correct altitude when arriving at the drop zone, it must be manually zeroed. Turning the unit off, then on, will clear any Altitude Offset and re-enter automatic calibration.

Automatic Off

The ECHO 3™ automatically switches off if no jump has been made within 14 hours, no button has been pressed within 14 hours, or the unit has not been in Flight Mode within 14 hours.

Factory Default Warnings

Yellow / Student Jump Mode:	1st Warning	2nd Warning	3rd Warning	4th Warning
Climb to Altitude Warning:	1000 feet	'----'	'----'	'----'
High Speed Warning:	'----' feet	6000 feet	4500 feet	2300 feet
Low Speed Warning:	1200 feet	900 feet	600 feet	300 feet

Blue / Tandem Jump Mode:	1st Warning	2nd Warning	3rd Warning	4th Warning
Climb to Altitude Warning:	1100 feet	1200 feet	'----'	'----'
High Speed Warning:	7000 feet	5500 feet	4000 feet	3000 feet
Low Speed Warning:	2200 feet	1900 feet	1600 feet	1300 feet

Red / Expert Jump Mode:	1st Warning	2nd Warning	3rd Warning	4th Warning
Climb to Altitude Warning:	1200 feet	1300 feet	1400 feet	'----'
High Speed Warning:	8000 feet	6500 feet	5000 feet	4000 feet
Low Speed Warning:	3200 feet	2900 feet	2600 feet	2300 feet

MAINTENANCE

Reset ECHO 3™

A reset may be necessary for troubleshooting and firmware verification.



Locate the small hole to the right of the battery cover.
Insert a paper clip or similar into hole, press and release.
Battery system calibrates.

The firmware version will be displayed after reset.

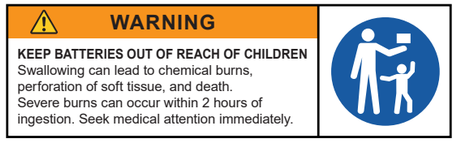
Battery Change

Only use Renata CR 2325 batteries (2 ea.).
Battery cover screw specs: M3/T6 head (4.5mm length).



Remove the screws and battery cover.
Remove both batteries and note the polarity.
Install 2 new batteries.
Install battery cover, and ensure rubber seal is in correct placement.
Place and tighten screws, using a torque screwdriver set at 0.3 Nm.

Reset ECHO 3™ after battery replacement.
All settings and logbook is kept in a non-volatile memory and will not be lost, however time may need to be set again after battery change.



WARNING: The battery cover and seal must be installed correctly, using correct screws and torque, before any water jumps are made.

Air Filter Change

Prior to a water jump: Make sure the battery screws are tightened to 0.3 Nm and no foreign objects hinders the function of the cover.

The ECHO 3™ is waterproof to a depth of 5 feet, for 24 hours.

If the ECHO 3™ is submerged into water, allow the unit and air filter to dry in a warm place for 48 hours.
The air filter must be replaced if jumping is to be resumed immediately, or if the air filter is suspected to be contaminated.

To change the air filter, located inside the battery cover, remove the screws and battery cover. Install new battery cover and ensure rubber seal is in correct placement. Place and tighten screws using a torque screwdriver set at 0.3 Nm.



Reset ECHO 3™ after battery cover replacement.

TROUBLESHOOTING

If the ECHO 3™ detects an issue, an error symbol is shown (ERR) with a number at the top of the screen.

Error codes:

1: Transducer defective
2: Transducer out of range
3: Transducer Time Out too long
4: Crystal defective
5: Communications error to flash
100: Flash defective

Always restart ECHO 3™ to attempt to remedy a single ERR code.

If the ERR code persists, then also perform battery change.

After unsuccessful restart of the ECHO 3™, a Factory Reset is necessary:

To perform a Factory Reset, press and hold ▪ while pressing the reset button. Continue to hold ▪ until the display flashes 5 times and the screen returns to the main window.

WARNING: All warning settings will be lost with Factory Reset.

If the ECHO 3™ is still faulty after Factory Reset, it must be serviced by an LB Altimeters Service Center.

CALIBRATION AND MAINTENANCE REQUIREMENTS

Calibration and maintenance by LB Altimeters Service Center is optional every 4, 8, and 12 years, following the ECHO 3™ original date of manufacture.

If the ECHO 3™ exceeds mbar tolerances listed in the Specifications section, and absolute air pressure is required for DZ elevation or offset, calibration can be performed by LB Altimeters Service Center.

Note: When turned on the ECHO 3™ unit runs a self-test and calibrates to the current ground level, and the ECHO 3™ will use measured air pressure for altitude calculations.

The ECHO 3™ can continue to be used until calibration is possible.

When setting/changing the altitude using the mbar setting via Altitude Offset, the ECHO 3™ will use absolute air pressure for altitude calculations.

It is recommended that the ECHO 3™ is calibrated by LB Altimeters Service Center before continued use.

SPECIFICATIONS

Mechanical:

Casing:	Rugged and precision machined aircraft aluminum
Screen glass:	2mm thickness - Hardened glass lens
Dimensions:	64mm x 44mm x 15mm
Weight:	68g
LCD viewing area:	34mm x 29.5mm
Backlight intensity steps:	1 - fixed
ALTISET II™ IrDa compatible:	Yes

Altitude Adjustment:

Altitude in mbar offset:	Yes
Altitude mbar offset range:	200 to 1075 mbar (20,67 to 31,74 In Hg)
Present mbar steps:	0.5 mbar
Altitude in feet/meter offset:	Yes
Altitude feet/meter offset range:	-19900 ft. to +19900 ft. (-6000 m to +6000 m)
Present altitude steps:	± 10 ft. (5 meters)

Tolerances:

Altitude display:	± 1%
Mbar:	± 1 mbar

Factory default settings:

Feet / meter:	Feet

Other:

Operating altitude:	0 to 40,000 ft. (0 to 12,200 m)
Storing Temperature:	-20C to +70C
Operating Temperature Range:	-30C to +60C continuous operation
Will operate at -50°C for:	10 minutes
Storing Pressure:	200 to 1075 mbar
Maximum allowable humidity:	Up to 99,9% relative humidity
Waterproof:	5 feet for 24 hours
Function Period:	14 hours
Maintenance:	Optional 4, 8 and 12 years, from date of manufacture
Battery type:	2 x Renata CR 2325
L&B part no.:	901-00051
NATO Stock no.	6675-22-641-6949

WEEE

Electrical and electronic equipment (EEE) and materials can be dangerous or hazardous to either health or the environment and must be disposed of correctly. Device must not be disposed of as general household waste but must be collected separately.



WARRANTY

The following conditions apply to the ECHO 3™ warranty:
If within 24 months of the purchase of ECHO 3™ a defect or damage is identified by faulty manufacture, LB ALTIMETERS will repair the unit at no cost to the end user.

To make a claim under this warranty, send the unit to an authorized dealer or directly to LB ALTIMETERS together with the dated purchase invoice or receipt.

The warranty becomes void if damage is caused by external circumstances or if the unit has been serviced or repaired by third parties unauthorized by our national agents or LB ALTIMETERS. All further claims, especially for defects after skydiving accidents, are excluded. LB ALTIMETERS has no obligation to honor any extension of warranty granted by any national agent.

WAIVER OF LIABILITY

The buyer and user of the ECHO 3™ indemnify the manufacturer and vendor from any liability for damage incurred before, during and after skydiving with the instrument.

TACTICAL
ALTIMETERS