



## **ALTIMASTER NEPTUNE**

### **User Manual**

**Issue G  
June 2005**

Alti-2, Inc.  
1400 Flightline Blvd.  
Suite E  
Deland, FL 32724  
Tel: (386) 943-9333  
Fax: (386) 943-9303  
<http://www.alti-2.com>



## Introduction

Congratulations on buying an Altimaster Neptune!

Neptune information is constantly being updated. Please refer to our website, [www.alti-2.com](http://www.alti-2.com), for the latest information.

All altitude measurements are referred to in feet in this manual.

## Software Upgrades

The Neptune has an Infrared interface which allows you to update the built-in software as new versions become available. Software updates are available free of charge from our website: [www.alti-2.com](http://www.alti-2.com).

## Customer Support

The Neptune has a considerable number of options and facilities covering alarm settings, log book, manual mode, DZ offset, contrast, flip, backlight, etc., etc. There are hundreds of combinations of settings, and it is impossible to cover each one in detail. We have attempted to cover the basics of all functions, however:

If you have ANY problems or question, please call or e-mail us. We will do our best to help you get the most out of your Neptune.

386-943-9333  
[info@alti-2.com](mailto:info@alti-2.com)

We may have Altimaster Field Support at your drop zone. Check our online Altimaster Field Support locator: [http://www.alti-2.com/field\\_support\\_locator.htm](http://www.alti-2.com/field_support_locator.htm).

### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.



## Table of Contents

<b>INTRODUCTION.....</b>	<b>2</b>
<b>SOFTWARE UPGRADES.....</b>	<b>2</b>
<b>CUSTOMER SUPPORT.....</b>	<b>2</b>
<b>TABLE OF CONTENTS.....</b>	<b>3</b>
<b>BASIC OPERATION .....</b>	<b>4</b>
<b>BASIC SETUP PROCEDURE .....</b>	<b>4</b>
INSERT BATTERY.....	4
FITTING THE HELMET CLIP.....	6
HAND MOUNT.....	7
TIME AND DATE.....	8
LOGBOOK SETUP.....	9
ALARMS.....	9
<b>IR DOWNLOADS .....</b>	<b>10</b>
<b>DISPLAY SCREENS / MODES.....</b>	<b>11</b>
GROUND.....	11
ALTITUDE.....	12
CLIMB.....	12
FREEFALL .....	13
CANOPY.....	14
<b>ALARMS .....</b>	<b>14</b>
GENERAL.....	14
FREEFALL ALARMS.....	16
CANOPY ALARMS.....	18
<b>LOG BOOK .....</b>	<b>20</b>
<b>DZ SETUP.....</b>	<b>24</b>
<b>FLIP .....</b>	<b>25</b>
<b>BACKLIGHT.....</b>	<b>25</b>
<b>AUTO/ECON .....</b>	<b>26</b>
<b>MODES.....</b>	<b>26</b>
DEMO MODE.....	26
DEMO ALARMS .....	26
<b>TRAINING MODE.....</b>	<b>27</b>
<b>SPECIFICATIONS.....</b>	<b>28</b>
<b>DISASSEMBLY.....</b>	<b>28</b>
<b>GENERAL CLEANING.....</b>	<b>28</b>
<b>MAINTENANCE AFTER SUBMERSION IN SALT WATER .....</b>	<b>29</b>
<b>SERVICING .....</b>	<b>30</b>

## Basic Operation



All menus have the same basic operation; the top and bottom buttons move the cursor and the center button selects the highlighted choice.

## Basic Setup Procedure

### Insert Battery



Remove the two screws securing the battery cover using a Phillips screwdriver.

Be careful not to lose the O ring.

### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.



Insert one type Duracell DL2450 (or equivalent) battery.

2 batteries are provided; 1 is a spare.

The battery should only be inserted with the "+" side up, i.e. toward the buttons.

Do not let metal of any kind to come in contact with the battery, and do not allow two batteries to touch each other.

The Neptune will only be waterproof if you fit the o-ring into the groove in the battery cover.

This can be an awkward task and you may wish to use silicon grease or petroleum jelly to help hold the o-ring in the grove.

If you never jump near water you can leave the o-ring out.



Replace the two screws, but **DO NOT OVERTIGHTEN!** This can crack the battery cover and cause the unit to lose water resistance.

You can press the battery cover down to seal the o-ring to the body of the unit for maximum water resistance.

#### **WARNING**

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.

## Fitting the Helmet Clip



If you wish to use Neptune as an external audible altimeter, use the helmet clip and tie wraps provided.

Align the Neptune's speaker with the speaker hole in the helmet clip. Failure to do so may result in inaudible alarms.

Using the "Flip" function, the Neptune can be fitted with the buttons in either direction, on either side of your helmet. Use the tie wraps to attach the clip to your helmet in desired position, keeping the speaker hole and speaker aligned.



The Neptune is snapped into the clip.

The clip is designed to fit in a recess as shown. If mounted on a non-recessed helmet, we suggest that a rubber band be fitted around the clip to prevent the Neptune from sliding out.

### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.



## Hand Mount



If you wish to use Neptune as a visual altimeter we suggest you use the hand mount provided.



Lay the hand mount across the back of the Neptune. Line up the four (4) holes with the threaded inserts in the back of the Neptune and insert the screws provided, with the washers between the fabric and the screws.

You may use Loctite to hold the screws securely in place.



If you wish to wear the Neptune on your wrist, like a watch, use the wrist mount provided.

The fabric wrist mount is attached to the back of the Neptune in the same way as the hand mount. The narrow wrist strap is then fed through the channel in the wrist mount.

Metal backplates were previously issued with Neptunes. Do NOT use one of these backplates alone with the narrow wrist strap; this setup will crack the display!

### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.

## Time and Date

Setting the time and date is typical of many Neptune setup menus. This adjustment is explained in detail to familiarize you with the menu system.



The system starts up in the ground screen. It displays time, date and temperature.

Icons indicate:

- the battery state
- alarms enabled or disabled
- logbook enabled or disabled
- backlight enabled (no icon for disabled)



Start by pushing the center "Menu" button on the ground screen. The Main Menu will be displayed.

Move the cursor (top or bottom button) to "System" and press "Select" (center button).



In the "System" menu, most of the basic setup options are under "Options 1" or "Options 2".

Move the cursor (top or bottom button) to "Options 2" and press "Select" (center button)



You will now see the "Time/Date" setting option, as well as many others.

(Neptune pictured with optional Armor and Screen Protector)

### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.





The cursor will already be on the "Hours" setting.

Use the top and bottom buttons to increase or decrease the number, then press "Select" and the cursor will move to the next item.

When all entries have been adjusted the system will automatically exit from this screen.

## Logbook Setup



From the "System" menu, select "Log Setup"

The Logbook setup menu allows you to set the starting number of jumps and starting Freefall (FF) time.

If necessary it also allows you to delete the entire logbook.

## Alarms



From the Main Menu, move the cursor down to "Alarms" and press "Select"

### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.

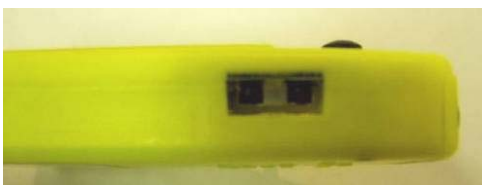


Neptune will display the current alarm group and altitude settings.

If the settings are correct, select "OK". If you want to change them, select "Edit/Select"

Alarm setup is described in detail under the 'Alarms' section of this manual.

## IR Downloads



The Neptune has a built in IrDA compliant infrared port which provides a wireless link to your PC.

The IR port allows:

- Neptune software to be updated
- The log book to be downloaded to Paralog.

For Neptune software updates, go to [www.alti-2.com](http://www.alti-2.com). Full download instructions are included with the program software.

Instructions on downloading jumps to Paralog can be found in the Log Book section of this manual. Paralog can be purchased online at [www.paralog.net](http://www.paralog.net).

If you have any questions or problems updating your Neptune, please go to our online Altimaster Field Support locator to see if we have Field Support at your drop zone. If there is none, please call or e-mail Alti-2.

[www.alti-2.com/field\\_support\\_locator.htm](http://www.alti-2.com/field_support_locator.htm)

[info@alti-2.com](mailto:info@alti-2.com)

386-943-9333

### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.

## Display Screens / Modes

### Ground



The ground display shows time, date and temperature, and also shows status icons for backlight, logbook, alarms, and battery.

The Neptune has a power saving mode which switches the display off after 30 minutes. The Neptune will continue to function as normal; the display can be reactivated by pushing any button. It will also reactivate automatically if the unit switches to Climb Mode, or senses a change in the atmospheric pressure. It is not unusual for your Neptune display to switch on even if you are not jumping.

There is no on/off switch on the Neptune. The two holes on the back of the unit are for the speaker and filter; touching either one could irreparably damage your Neptune.

### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.

## Altitude



When "Alt" is showed in the bottom right of the screen (in Ground Mode and Climb Mode), push the bottom button to go to the "Altitude" screen. This shows altitude AGL (above ground level) and altitude MSL (Mean Sea Level).

THE MSL value is actually QNE, or Pressure Altitude, which means that the value will change with barometric pressure. It is normal for the MSL reading to vary as much as +/- 300'.

## Climb



The Climb screen shows:

- Time to target altitude (not shown on the picture above).
- Target altitude is the exit altitude from your previous jump.
- Current time

### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.

- Current altitude
- Climb Rate
- Temperature
- Status icons
- In the screen above, the backlight, logbook, & freefall alarms are enabled, and the battery is full. Canopy alarms are disabled.

In Climb Mode, you can adjust any setting, look at your logbook, and turn functions on and off, right up until you exit the plane.

You do not have to return to the main screen when you are ready to skydive, or go to the altitude screen. The Neptune will switch to Freefall Mode, no matter what screen is displayed when you exit.

## Freefall

When the Neptune detects you are in freefall, it will switch to Freefall Mode, regardless of which screen you may be in at that time. The freefall display shows altitude in thousands of feet (or hundreds of meters).



There is also an analog display called the “fun meter”. The “fun meter” is a black bar across the bottom of the screen which starts to fill in at 3,000 feet and is a complete solid bar at 12,000 feet. The purpose is to give you a quick indication of where you are between 12,000 feet and 3,000 feet.

### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.

NOTE: If the analog bar (fun meter" is empty it does NOT mean you are at 3,000 feet, it means you are BELOW 3,000' – check the numbers!!

## Canopy



The canopy display shows altitude in feet to a resolution of 10 feet. It also shows rate of descent in feet per second.

The canopy display may be disabled (**Menu > System > Options 1 > Canopy Display**). If you disable the canopy display you will see the freefall display while under canopy.

### CAUTION

Do not allow the canopy descent rate information to distract you from safely flying and landing your canopy.

## Alarms

### General

The Neptune has 4 groups of programmable alarms, each with 3 individually selectable alarm altitudes.

There are two types of alarms from which to choose: freefall and canopy. You may have up to one freefall alarm group and one canopy alarm group enabled at the same time. Each is discussed in greater detail in the next sections.

### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.





In the Ground screen, the underlined alarm icon indicates that freefall and canopy alarms are both activated.



We recommend that alarms are disabled (**Menu > System > Options 1 > Audible > Disable**) if you are using Neptune as a visual altimeter. The alarm icon will change on the ground screen to show that the alarms have been disabled.

The underlined alarm icon indicates that freefall and canopy alarms are both activated.



The alarm icon without underline indicates that only freefall alarms are activated. Canopy alarms will not sound.

If you attempt to check the alarms settings (**Menu > Alarms**) while they are disabled you will see the following screen:



Select "enable" to activate the alarms, or exit if you wish to leave them disabled.

If alarms are enabled, **Menu > Alarms** will display the following screen showing the current active group and the alarm altitudes.

#### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.



To exit without making changes select "OK" or to change the setting select "Edit/Select".

## Freefall Alarms

The following procedure shows how to edit and select another freefall alarm group:



When you select "Edit/Select," you will see the screen shown on the left. Group 1 in this case is the active group.



**To set up another group for freefall alarms**, highlight the group to be edited, in this case group 2, and press "Select".



You will see the current settings for Group 2. The first item is the name; if you wish to change the name, press "Select".

### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.



Scroll through the list to change the group name. In this case "4-way" has been selected. Press "Select" to confirm the new name.



The same method is used to select and change the 3 alarm altitudes.



When the alarm name and altitudes are correct, highlight "Activate Group," then "Select".



The menu text "GRP ACTIVE" will confirm that this group is now active.

Now highlight and select "Exit"



The process is now complete. Group 2 has been set for 4-way, and the arrows confirm that it is the active group.

Freefall alarms have 16 possible names: Group 1, Group 2, Group 3, Group 4, Group 5, AFF, Birdman, Student, Camera, Tandem, Big Way, Freely, 16-way, 10-

#### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.

way, 8-way, or 4-way. This group name will be written to the log of that particular jump, whether alarms are enabled or not.

Freefall alarms will sound only if freefall speeds are reached at the preset altitudes. If, for example, your Group 1 alarms are set at 4500', 3000', and 1500', the third alarm will only go off if you are still in freefall at 1500'.

The first two alarms will sound for 3 seconds and then stop, however the third (flat-line) alarm is designed to activate if you exceed a preset vertical velocity below the third alarm altitude. So, if you perform a radical canopy maneuver below your third alarm altitude you should expect to hear the flat-line warning. (Note: Activating a swoop alarm will prevent the "flat-line" sounding when under canopy).

### **Canopy Alarms**

Version 2.2.0 (and later versions) incorporates a new 'Swoop Mode' with canopy alarms in addition to the standard freefall alarms.

#### **CAUTION**

With canopy alarms enabled, the Neptune will not go back into Freefall Mode after it has transitioned to Canopy Mode. This means that you will not hear the third flat-line freefall alarm when performing aggressive canopy maneuvers, or if you cutaway from a slow-speed malfunction.

Swoop alarms are three programmable 'chirps' that operate similar to the freefall alarms, but can be set in 10' increments, instead of 100'. These chirps are in addition to your regular freefall alarms.



**To activate swoop alarms, select "Swoop 1".**

#### **WARNING**

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.





Default settings are 1500', 1000' and 600'.



Change swoop alarm altitudes as you would change freefall alarms. Select the item you wish to change.



The top button will increase the altitude in increments of 10'; the bottom button will decrease.



Once you have set your alarm altitudes, select "Activate Grp" to turn canopy alarms on.



"GRP ACTIVE" indicates that this alarm group, "Swoop 1", is enabled.

#### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.



The two sets of double arrows indicate that freefall group "4-way" and canopy group "Swoop 1" are *both* enabled.

The Ground screen alarm icon will also be underlined.



**To turn off canopy alarms**, select that group.

Select "GRP ACTIVE".



The option to activate this alarm group will be displayed. Exit without selecting to keep this group disabled.



The single set of double arrows indicates that *only* freefall group "4-way" is enabled.

The Ground screen alarm icon will not be underlined.

You can choose not to have any canopy alarm groups; simply set all 4 groups to freefall names and altitudes.

## Log Book

To use the logbook function, make sure it is enabled (**Menu > Log Book > Enable/Disable**). The log book icon on the ground mode screen will confirm that logging is enabled.

### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.



A **summary** of your jumps is available (**Menu > Log Book > Summary**), which shows total jumps and total freefall time.

**Detailed jump logs** can be viewed for the last 10 jumps, and can be reviewed on a jump by jump basis (**Menu > Log Book > View Logs**). You will see the latest jump number displayed. Use the up button to highlight the jump number (Jump 956 in the photograph below), and press the center select button.



The first page of the detail log for the jump shows:

- Jump #
- Date
- Time

Select that jump to view your jump details:



- Jump #
- Grp: The alarm group selected at the time of the jump (even if alarms are disabled).
- Exit: Exit altitude
- Dep: Deployment altitude
  - Deployment altitude is the altitude at which you were under a fully deployed canopy, not the altitude at which you threw the pilot chute.
- FF: Freefall time

#### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.

When you select "Next" you will see:



- Avg: Average velocity for the freefall portion of your skydive, where freefall = exit altitude until you are under a fully open canopy
- 12K: Average velocity between 12,500' and 11,500'
- 9K: Average velocity between 9,500' and 8,500'
- 6K: Average velocity between 6,500' and 5,500'
- 3K: Average velocity between 3,500' and 2,500'

The velocities are an average of your velocity within 1000 feet of the reported altitude. This is how fast you were going at that altitude, it is not an average over a large part of your skydive.

Note that the 4 velocity averages do not incorporate data for the entire skydive. Average velocity for the entire skydive does not equal the average of the 4 averages.



When you select "Next" you will go back to the screen shown above. If you then select "View Next" the counter will go forward one jump; "View Previous" goes back one jump.

#### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.

If you descend with the aircraft, the Neptune may log a jump. Use “Delete Last” (**Menu > Log Book > Delete Last**) to erase the jump.

If you encounter any logging errors, please make sure that you have the latest version of software. Your problem may have already been addressed and resolved!

To **download your jumps to Paralog** ([www.paralog.net](http://www.paralog.net)), you must have an IRdA interface on your computer.

In the Neptune logbook, select the “IR Connect” function to begin the upload process (**Menu > Log Book > IR Connect**).



In Paralog, select **File > Read Neptune**. Refer to Paralog for directions on setting up your preferences in that program.

Next, select “Start Upload” in your Neptune and align the IR port of the Neptune with the IR port on your computer.



The Neptune should connect with your computer and warble. A popup dialogue box will also appear in the lower right corner of your computer screen. This box says ‘Click here to send files to the computer Neptune’ – **DO NOT** click this box!

**WARNING**

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.

After connecting with Paralog, your jumps will be downloaded into that program.

## DZ Setup



The "**Set DZ Offset**" (**Menu > DZ Setup > Set DZ Offset**) function allows you to take off at one location and land at another DZ which is at a different altitude. The only function of DZ offset is to enter a number which is either added or subtracted from the AGL altitude that is displayed. The DZ altitude continues to be updated normally.

To cancel DZ offset: **Menu > DZ Setup > Set DZ Offset > Cancel**

"**Manual Mode**" (**Menu > DZ Setup > Manual Mode**) allows you to override ALL automatic functions. The display will NOT time out after 30 minutes. It will ask you to enter the current altitude and will then display the altitude that you set. It will display increases or decreases from the altitude you set.

### CAUTION

ALL automatic functions are disabled in manual mode: the DZ altitude will NOT be updated.

### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.

To cancel manual mode: **Menu > DZ Setup > Manual Mode > Cancel Manual > Disable**

If the altitude on the ground is not zero AGL, go to **Menu > DZ Setup > IM on DZ**. This function is useful if, for example, you drive up a hill and then get in the aircraft a short time later. The unit may not have updated the DZ altitude. Selecting "IM on DZ" causes the unit to fix the DZ at the current altitude. It will then continue to automatically update as normal.

## Flip

If you want to wear the unit on your right hand, flip the display upside down by selecting **Menu > System > Option 1 > Flip > Enable**.

To disable the flip option, select **Menu > System > Option 1 > Flip > Disable**.

## Backlight

An electroluminescent backlight is included for night jumps. Use of the backlight will shorten battery life. We recommend that you leave it *disabled* unless you are actually making a night jump, in which case you should put in a fresh battery to ensure that your Neptune will have full power throughout your entire jump.

### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.

The menu sequence to enable the backlight is **Menu > System > Options 1 > Backlight > Enable**. The backlight icon will appear on the ground screen to confirm that it is activated.

When enabled, the backlight will stay on for 3 seconds every time you press a button, and will stay on when freefall and/or canopy flight is detected.

## Auto/Econ

This option does not function in version 2.x software. Neptunes remain in "Auto" mode.

## Modes

### Demo Mode

To go through a demonstration of what the Neptune will look like during a normal skydive, used as a visual altimeter, go to **Menu > System > Modes > Demo**.

This will show the following screens in sequence:

- Boot up logo
- Your Neptune Serial Number and Software Version
- Ground
- Altitude
- Climb Mode
- Freefall
- Canopy

### Demo Alarms

The alarm demo will demonstrate the three freefall alarm tones that the Neptune uses.

### Menu > System > Modes > Demo Alarms

#### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.



## Training Mode



To access Training Mode, go to **Menu > System > Modes > Setup Training**.



Edit the desired exit and deployment altitudes in the same way alarm altitudes are set, and then select "Exit".



To enter Training Mode, select "Training". There are three options: "High Speed Mal", "Low Speed Mal" and "Normal Sim", each corresponding to one of the three Neptune buttons.

The countdown at the bottom of the screen displays how much time there is remaining until the Neptune exits the Training Mode screen.

When you select any of the Training simulations, the Neptune will display a screen that looks like Freefall Mode, starting at the exit altitude you set. When it reaches your selected deployment altitude, it will switch to a screen that looks like Canopy Mode, and descend at the rate you selected (high, low, or normal speed).

### CAUTION

Training Mode is intended only for ground training.

### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.

## Specifications

Altimaster Neptune	
Overall dimensions	1.69" x 2.49" x 0.55"
Weight:	1.2 oz (without mount)
Max altitude	40,000 ft. ++
Temperature	-20 deg C to +60 deg C
Max depth (waterproofing)	6 feet for 1 hour
Body material	Polycarbonate
Battery Type	DL2450 (or equiv)
Dial face illumination	Electroluminescent
Alarms	4 groups of 3 altitude alarms

## Disassembly

The Neptune cannot be disassembled by the user. Unless specifically described here, all maintenance on your altimeter should be performed by Alti-2, Inc., 1400 Flightline Blvd. Suite E, Deland, FL 32724 Tel: (386) 943 9333 Fax: (386) 943 9303 e-mail: [info@alti-2.com](mailto:info@alti-2.com)

## General Cleaning

Wipe altimeter with a damp cloth.

### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.

## Maintenance after submersion in salt water

### CAUTION

Salt deposits must be removed from the filter after submersion in salt water. Failure to remove salt deposits may lead to the filter becoming blocked and serious lag may occur in freefall as a result.

To remove salt deposits submerge the altimeter in clean fresh water for approximately 10 minutes. Agitate occasionally. Remove from water, shake off excess and allow to air dry.

Do NOT touch the filter. Doing so may cause irreparable damage to your Neptune.

The speaker cavity is sealed internally. If water comes out of that area, keep shaking until there appears to no more water in the speaker cavity.

### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.



## Servicing

If the altimeter behaves abnormally or unusually, discontinue use IMMEDIATELY and contact Alti-2, Inc.

Alti-2, Inc.  
1400 Flightline Blvd.  
Suite E  
Deland, FL 32724

Tel: (386) 943 9333  
Fax: (386) 943 9303

e-mail: [info@alti-2.com](mailto:info@alti-2.com)

Please be sure to include contact information such as Phone Number, Fax Number, and/or email address, and a description of the problem.

Status on your altimeter can be checked by contacting the Alti-2, Inc. Service Department, or by initiating a Request for Repair Status through the Alti-2, Inc. web-page: [www.alti-2.com](http://www.alti-2.com)

ALTIMASTER is a trademark of Alti-2 Incorporated  
The Altimaster Dial Face design is a trademark of Alti-2 Incorporated  
VELCRO® is a registered trademark of Velcro Ind. B.V.  
CYALUME is a registered trademark of American Cyanmid Company exclusively licensed to Omniglow Corporation.

### WARNING

PARACHUTING IS A HAZARDOUS ACTIVITY THAT CAN RESULT IN INJURY OR DEATH.

An altimeter is a device subject to malfunction, even when properly designed, built, assembled, maintained and used. Do not rely upon an altimeter for your safety. Your altimeter must only be considered as an aid when checking your altitude.

A visual cross reference with the ground should be used in combination with any altimeter.