# F11

# **OPERATING MANUAL**

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#### NOTICES

LIMITED TWO YEAR WARRANTY Visit the web site at <u>www.DiveAERIS.com</u> to find specific Warranty information and register.

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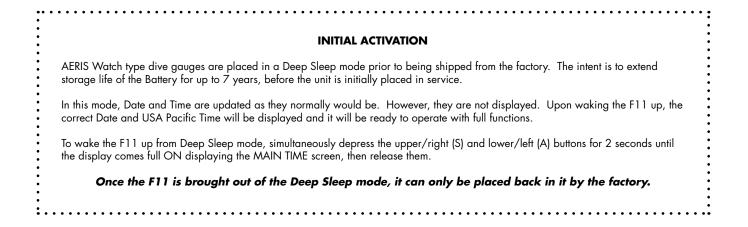
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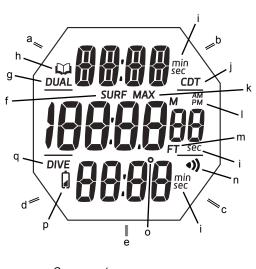
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#### PATENT NOTICE

U.S. Patents have been issued, or applied for, to protect the following design features: Data Sensing and Processing Device (U.S. Patent no. 4,882,678).



#### FULL LCD



- Components:
- a. Mode (M) Button
- b. Select (S) Button c. Light (L) Button
- d. Advance (A) Button
- e. LED Warning Light
- f. Icon Surface Interval Time
- g. Icon Dual Time
- h. Icon Log Mode
- i. Icon Minutes or Seconds
- j. Icon Countdown Timer
- k. Icon Maximum Depth
- I. Icon Time Am/Pm
- m. Icon Depth
- n. Icon Daily Alarm set
- o. Icon Degrees (Temp)
- p. Icon Low Battery
- q. Icon Elapsed Dive Time



# GENERAL

# **FEATURES & DISPLAYS**

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#### INTERACTIVE CONTROL CONSOLE

The Interactive Control Console consists of four Control Buttons that allow you to select mode options and access specific information. They are also used to enter Settings, operate the Backlight, and access additional screens of information.

Throughout this manual they will be referred to as the M, S, L, and A buttons.

- Upper/Left Mode (M) button
- Upper/Right Select (S) button
- Lower/Right Light (L) button
- Lower/Left Advance (A) button

#### **OPERATING MODE STRUCTURE**

Unless it is operating in Free Dive mode, the F11 will display Watch Main Time (Fig. 1), like a standard Watch, until the mode is changed.

The A button is used to access other Watch functions that include an Alternate display, Countdown Timer, Chronograph (stop watch/run timer), Daily Alarm, and Time settings. The M button is used to access and return from the Free Surface Main screen.

The screens of the Main and sub modes will remain on display until a button is pressed to access another screen or mode, activate a sequence, or for 2 minutes if no button is pressed. The Chronograph remains on display unless turned Off or another mode is accessed.

When operating in Free Mode, the F11 will enter Dive Mode upon descent to the DSD (Dive Start Depth) previously set which can be 2, 4, or 6 FT (feet) or 0.6, 1.2, or 1.8 M (meters) for 1 second. See page 19 for Set DSD.

#### **OPERATION AS A DIVING GAUGE**

Entering Settings relating to diving activities is only available in Free Surface Mode which also allows access to a Countdown Timer (separate from the Watch CDT), Log, and History Modes.

#### **COMPUTER INTERFACE**

Interface with a PC or Mac, to allow uploading settings and downloading data, is accomplished by connecting the F11 to a PC or Mac USB port using the special AERIS USB interface cable.

The software program together with the USB driver required is on the AERIS Product CD, or it can be downloaded from the AERIS web site. The program's Help serves as the user manual which can be printed for personal use.

The settings upload portion of the computer interface program can be used to set/change the Main Time, Date, Set Alarms group, and Set Utilities group using the same interface system.

Information available for retrieval (download) from the F11 to the download portion of the program includes dive number, surface interval time, start depth, end depth, maximum depth, elapsed dive time, start date, start time, lowest temperature under water, sampling rate, dive profile, and set points.

The computer interface program also allows update of select versions of the F11's firmware (operating system software).

• Refer to page 29 for more details relating to the computer interface system.

#### **GRAPHIC MESSAGES**

The segmented digits of the LCD are used to present various messages such as alarms, day of the week, modes, items being set; and graphics such as On, Off, Set, Last, Log, Hist.

#### **AUDIBLE ALARM**

A LED warning light, located at the 6 o'clock position on the side of the housing, is synchronized with the Audible alarm. It will flash as the Audible sounds, then turn off when the Audible shuts off. The Audible and LED will not be active if the Alarm is set OFF, an Alarm group setting which completely disables it.

When alarms strike, the Backlight will come On if Off and remain On until you turn it Off by pressing/releasing the L button or it turns Off automatically after 10 seconds.

Situation that will sound (2) 2 second beeps -

• RTI (Repeating Time Interval) alarm, if set On.

Situations that will sound 3 sets of (3) 1 second beeps -

- Watch Daily Alarm (surface only), if set On.
- Watch Countdown Timer reaches 0:00 (hr:min), if set On.
- Free Mode Countdown Timer reaches 0:00 (min:sec), if set On.
- SRT (Surface Recovery Time) alert, if set On.
- RDI (Repeating Depth Interval) alarm, if set On.





Fig. 1 - MAIN TIME



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Situation that will sound (1, 2, or 3) sets of (1 to 10) .125 second beeps -• Depth Alarms DA 1 to DA 6, if set On.

#### BACKLIGHT

To turn the Backlight On, press and release the Light button (< 2 seconds). The Backlight will remain On for the Duration time set (a Set Utilities selection) unless you turn it Off during that time.

- The Backlight will come On (even if set OFF) when alarms strike and remain On until turned Off or automatically after 10 seconds .
- Pressing and releasing the Light button (< 2 seconds) while the Backlight is On will turn it Off.
- Depressing the Light button for 2 seconds while the Backlight is On, will reset the timer and extend the On time to the full Duration time set.
- If the Light button is depressed for > 60 seconds, the Backlight will be disabled and not turn On until the button is released then pressed/released again.
- The Backlight will be disabled when there is a Low Battery condition, and be re enabled once the battery is replaced.
- Extensive use of the Backlight reduces Battery use life.
- Turning the Backlight Off when it is not being used will help extend Battery use life.
- The Backlight does not operate when the unit is connected to a PC or Mac.

#### AUTO GLO

When Auto Glo (a Set Utilities selection) is set On, Backlight operation on the surface in Watch and FREE modes is controlled as it normally would be by the Light button and Duration time set.

Upon entry into Dive mode, the Backlight activates (turns On) automatically and remains On throughout the full dive until entry into Surface mode when the Backlight operation reverts to normal.

#### **POWER SUPPLY**

The F11 utilizes (1) 3 volt CR2450 Lithium Battery.

Battery voltage is checked every 2 minutes during operation while on the surface.

- If voltage decreases to the Warning level (2.75 volts), the Battery icon will appear on the Watch Main Time and Free Surface screens (Fig. 2a) as an indication that the Battery should be changed prior to commencing a series of dives.
- If voltage decreases to the Alarm level (2.50 volts), the Battery icon will flash and operation will automatically revert to Watch Main Time and only operate in Watch modes until the Battery becomes completely depleted.
- Low Battery Warning/Alarm conditions are not displayed during Dive Modes.
- If a Low Battery condition was not displayed prior to starting a Dive, and a Low Battery condition occurs during the dive, there
  will be sufficient Battery power to maintain operation for the remainder of that dive. Upon surfacing, the graphics CHNG >>
  BATT will alternate (Fig. 3), then operation will automatically revert to and remain in Watch Main Time until the Battery becomes
  completely depleted.

Each display represents unique pieces of information. It is imperative that you understand the formats, ranges, and values of the information represented to avoid any possible misunder-standing that could result in error.

Understand which Time displays are represented as Minutes: Seconds and which are Hours:Minutes.

You must also understand the icons, symbols, and alpha/numeric messages presented.

The Informational Displays are described in detail as the various operating modes they appear in are presented throughout this manual.









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# WATCH MODE

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#### WATCH TIME

Main Time is the default screen displayed while in Watch Mode. In addition to Time of Day and Date, Day of the Week will be displayed which you can interchange with Dual Time which is an hour based differential that you can set. You can choose to have Watch Main Time displayed with Day of the Week or with Dual Time (such as when visiting a location in a different time zone).

Once Dual Time is set (by hour differential), it will automatically change when Watch Main Time is changed.

While viewing Watch Main Time you can access a sequence of selections including >>

ALT (additional data), Countdown Timer, Daily Alarm, Set Time, and Chronograph.

Button operations >>

- A (< 2 sec) to step forward through the sequence.
- M (< 2 sec) to step back through the sequence.
- M (2 sec, any time) to revert to Watch Main Time.
- No button action (for 2 min) revert to Watch Main Time.
- L to activate the Backlight.

#### **WATCH MAIN TIME**, information includes (Fig. 4A or 4B):

- > Day of the Week graphic (MON, TUE, etc.); or Dual Time (hr:min) with icon; whichever one is selected.
- > Main Time (hr:min\_sec) with AM (or PM) icon.
- > Battery icon, during a Low Battery condition.
- > Date as Month.Day (or Day.Month).
- > Alarm (speaker) icon, if the Daily Alarm is set On.
- A (< 2 sec) to access the ALT screen and step forward through the sequence described above.
- A (2 sec) to access Log and History.
- M (2 sec) to access FREE Surface Mode.
- M (< 2 sec) to access the Chronograph and step back through the sequence.
- S (2 sec) to interchange Day of the Week with Dual Time (if set On), selecting which one is to be displayed.
- S (< 2 sec) to silence the Daily Alarm.
- L (< 2 sec) to toggle the Backlight On/Off. Will be On for the duration time set.
- L (2 sec), while the Backlight is On, to reset the timer to keep it On for the full duration time set.

WATCH ALT (Alternate), information includes (Fig. 5A or 5B):

> Dual Time (hr:min) or OFF with icon; or Day of the Week graphic (MON, TUE, etc.); whichever one is not on the Main.

- > Temperature with °F (or °C).
- A (< 2 sec) to step forward to CDT.
- M (< 2 sec) to step back to Watch Main Time.
- Reverts to Main in 10 seconds if A or M is not pressed.
- L (< 2 sec) to toggle the Backlight On/Off. Will be On for the duration time set.
- L (2 sec), while the Backlight is On, to reset the timer to keep it On for the full duration time set.

#### WATCH CDT (Countdown Timer)

This selection provides access to a CDT for use in Watch mode.

Once set and started, it will continue to run in the background while on the surface in Watch Mode until it is turned Off or the time counts down to 0:00 at which time the alarm will strike and it will revert to Off.

Upon accessing FREE mode or starting a dive, Watch CDT operation will be terminated and the time reset to the previous setting.

#### CDT Lead-in, information includes (Fig. 6):

- > Graphics Go To and Cdt with icon.
- S (< 2 sec) to access CDT Status.
- A (< 2 sec) to step forward to Daily Alarm Lead-in.
- M (< 2 sec) to step back to Watch ALT.</li>
- M (2 sec), or 2 minutes of no button action, will revert to Watch Main Time.

#### **CDT Status,** information includes (Fig. 7A/B):

- Countdown Time (hr:min) as >>
   0:00 if no time has been set, or it completed the countdown; hr:min set if Off and ready to start; hr:min remaining of On with a countdown in progress.
- > Graphic Cdt.
- > Graphic OFF (or ON) flashing (Fig. 7A).



(Day of Week selected)



Fig. 4B - MAIN TIME (Dual Time selected)







Fig. 5B - WATCH ALT (Dual Time on Main)



Fig. 6 - CDT LEAD-IN



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- A (< 2 sec) to step forward through selections of OFF, ON, and SET (Fig. 7B).
- M (< 2 sec) to step back through the selections.
- S (< 2 sec) to save the selection.
  - >> If OFF or ON is selected, operation reverts to the CDT Lead-in screen. >> If SET is selected, the Set CDT screen is displayed.
- S (2 sec) to revert to CDT Lead-in, if no setting change.
- M (2 sec), or 2 minutes of no button action, will revert to Watch Main Time. ٠

#### Set CDT, information includes (Fig. 8):

- Timer setting (hr:min) with icon, with Hour digits flashing.
- Graphics Cdt and SEt. >
- A (hold) to scroll upward through Hour set points (8/sec) from 0: to 23: in increments of 1: (hr).
- A (< 2 sec) to step upward through Hour set points.
- M (< 2 sec) - to step back through set points.
- S (< 2 sec) to save the Hour setting and flash the Minute digits.
- A (hold) to scroll upward through Minute set points (8/sec) from :00 to :59 in increments of :01 (min).
- A (< 2 sec) to step upward through Minute set points.
- M (< 2 sec) to step back through set points one at a time.
- S (< 2 sec) to save the CDT setting and revert to the CDT Status screen with SEt flashing, allowing ON or OFF to be selected as previously described.
- > ON will then start the countdown and revert to CDT Lead-in.
- OFF will save the setting and revert to CDT Lead-in.

The CDT will run in the background until it counts down to 0:00, or it is set OFF, or FREE Mode is accessed or a dive is started in which case the countdown will terminate and revert to OFF.

When CDT reaches 0:00, the Audible will sound during which the alarm LED will flash and 0:00 with the CDT icon will flash on the Watch Main.

#### DAILY ALARM

- When set On, the Daily Alarm will -
  - > be synchronized with Watch Main Time.
  - sound the Audible every day at the Time set, while operating in Watch Mode. >
  - not sound the Audible while operating in FREE Mode.
  - run in the background until set Off. >

#### Daily Alarm Lead-in, information includes (Fig. 9):

- > Graphics Go To and dAY AL with alarm (speaker) icon.
- S (< 2 sec) to access Daily Alarm Status.
- A (< 2 sec) to step forward to Set Time Lead-in.
- M (< 2 sec) to step back to CDT Lead-in.
- M (2 sec), or 2 minutes of no button action, will revert to Watch Main Time.

#### Daily Alarm Status, information includes (Fig. 10):

- Graphic ALRM. >
- Alarm Time (hr:min) with AM (or PM) icon if 12 Hour.
- Graphic ON (or OFF) flashing, with alarm icon.
- A (< 2 sec) to step forward through the selections of OFF, ON, and SET.
- M (< 2 sec) to step back through the selections.
- S (< 2 sec) to save the selection, and -
- > if OFF or ON is selected, revert to Daily Alarm Lead-in.
- > if SET is selected, the Set screen is displayed.
- S (2 sec) to revert to Daily Alarm Lead-in, if no setting change.
- M (2 sec), or 2 minutes of no button action, will revert to Watch Main Time.

#### Set Daily Alarm, information includes (Fig. 11):

- > Graphic ALRM.
- Alarm Time (hr:min) with icon, Hour digits flashing. >
- Graphic SEt with alarm icon. >
- A (hold) to scroll upward through Hour set points (8/sec) from 0: to 23: in increments of 1: (hr).
- A (< 2 sec) to step upward through Hour set points.
- M (< 2 sec) to step back through set points.
- S (< 2 sec) to save the Hour setting and flash the Minute digits.
- ٠ A (hold) - to scroll upward through Minute set points (8/sec) from :00 to :59 in increments of :01 (min).
- A (< 2 sec) to step upward through Minute set points.
- M (< 2 sec) to step back through set points.
- S (< 2 sec) to save the Alarm setting and revert to the Daily Alarm Status screen with SEt flashing, allowing ON or OFF to be selected as previously described.

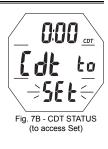






Fig. 9 - DAILY ALARM LEAD-IN



Fig. 10 - DAILY ALARM STATUS (set. readv)



or OFF



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#### SET TIME (& DATE) Sequence >> Lead-in >> Date Format >> Hour Format >> Dual Time >> Time of Day >> Date. set points remain as set until changed. Set Time Lead-in, information includes (Fig. 12): > Graphics Go To and SEt - t. S (< 2 sec) - to access Set Date Format. LEAD-IN A (< 2 sec) - to step forward to Chrono Lead-in. M (< 2 sec) - to step back to Daily Alarm Lead-in. M (2 sec), or 2 minutes of no button action, will revert to Watch Main Time. Set Date Format, information includes (Fig. 13): Date Format establishes the position that the Month (M) digits are displayed relative to the Day (D) digits, on the left or right. > Graphic M - D (or D - M) flashing. Graphic SEt. > A or M (< 2 sec) - to toggle between M - D and D - M. FORMAT S (< 2 sec) - to save setting and access Set Hour Format. S (2 sec) - to step back to Set Time Lead-in. M (2 sec), or 2 minutes of no button action, will revert to Watch Main Time. Set Hour Format, information includes (Fig. 14): Hour Format establishes number of hours displayed for Time of Day, 1 to 12 (AM and PM) or 1 to 24. > Graphic 12HR (or 24HR) flashing. Graphic SEt. > A or M (< 2 sec) - to toggle between 12HR and 24HR. S (< 2 sec) - to save setting and access Set Dual Time. FORMAT S (2 sec) - to step back to Set Date Format. M (2 sec), or 2 minutes of no button action, will revert to Watch Main Time. Set Dual Time Differential, information includes (Fig. 15): This feature allows you to set an Hour based numeric time Differential ranging from - 23 through 0 to + 23 (hours). It provides a second (Dual) Time equal to Watch Main Time +/- the Hours selected. Graphic OFF, or the Hour Differential (+ or - sign with numeric digits) flashing. Graphics diFF Hr and SEt, with DUAL icon. > A (hold) - to scroll upward through the set points (8/sec) from - 23 through 0 to + 23 in increments of 1 (hour). A (< 2 sec) - to step upward through set points. M (< 2 sec) - to step back through set points. • S (< 2 sec) - to save the setting and access Set Time. S (2 sec) - to step back to Set Hour Format. M (2 sec), or 2 minutes of no button action, will revert to Watch Main Time. Set Time of Day, information includes (Fig. 16): This setting changes Time of Day, which also changes Dual Time. Graphic SET. > Time of Day (hr:min), Hour digits flashing, with AM (or PM) icon if 12 Hour Format, no icon if 24 Hour. (hr:min) A (hold) - to scroll upward through Hour set points (8/sec) from 12: AM to 11: PM, or 0: to 23: if 24 Hour Format, in increments of 1: (hr). A (< 2 sec) - to step upward through Hour set points. M (< 2 sec) - to step back through set points. ٠ S (< 2 sec) - to save the Hour setting and flash the Minute digits (Fig. 30).

- S (2 sec) to step back to Set Dual Time Differential.
- A (hold) to scroll upward through Minute set points (8/sec) from :00 to :59 in increments of :01 (min).
- A (< 2 sec) to step upward through Minute set points.
- M (< 2 sec) to step back through set points.
- S (< 2 sec) to save the Time setting and access Set Date.
- S (2 sec) to step back to Set Hour.
- M (2 sec), or 2 minutes of no button action, will revert to Watch Main Time.

### Set Date, information includes (Fig. 17):

Sequence is Year >> Month >> Day, regardless of Format set (position on the display).

#### > Graphic SET.

- Year digits, flashing.
- Month.Day (or Day.Month).









Fig. 15 - SET DUAL TIME (Hour Differential)



Fig. 16 - SET TIME





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- A (hold) to scroll upward through Year set points (8/sec) from 2013 to 2055, in increments of 1.
- A (< 2 sec) to step upward through Year set points.
- M (< 2 sec) to step back through set points.
- S (< 2 sec) to save the Year setting and flash the Month digits.
- S (2 sec) to step back to Set Time of Day.
- A (hold) to scroll upward through Month set points (8/sec) from 1 to 12 in increments of 1.
- A (< 2 sec) to step upward through set points.
- M (< 2 sec) to step back through set points.
- S (< 2 sec) to save the Month Set point and flash the Day digits.
- S (2 sec) to step back to Set Year.
- A (hold) to scroll upward through Day set points (8/sec) from 1 to 31 (max for that month) in increments of 1.
- A (< 2 sec) to step upward through set points.
- ٠ M (< 2 sec) - to step back through set points.
- S (< 2 sec) to save the Date setting and revert to Set Time Lead-in.
- S (2 sec) to step back to Set Month.
- M (2 sec), or 2 minutes of no button action, will revert to Watch Main Time.

#### CHRONOGRAPH (Stop Watch, Lap/Run Timer)

The Chrono is operational during all modes (Watch, Free Surface, and Dive). Once started, the Chrono remains on the display and continues to run until S is pressed to revert to the Lead-in screen (if in Watch or FREE Surface mode) or to the Dive Main (if a dive was started while the Chrono was running). It runs unseen in the background when not on display.

Chrono Lead-in, information includes (Fig. 18):

- > Graphics Go To and CHro.
- S (< 2 sec) to access Chrono Status.
- A (< 2 sec) to step forward to Watch Main.
- M (< 2 sec) to step back to Set Time Lead-in.
- M (2 sec), or 2 minutes of no button action, will revert to Watch Main Time.
- L (< 2 sec) to toggle the Backlight On/Off. Will be On for the duration time set.
- L (2 sec), while the Backlight is On, to reset the timer to keep it On for the full duration time set.

#### Chrono Status, information includes (Fig. 19A/B):

- > Graphic CHRO with min & sec icons.
- > Elapsed run time >> flashing as 0:00\_00 if not yet started or after reset; or counting up to 199:59\_99 (min:sec\_ .01 sec) if previously started. After the first 4.99 seconds, the .01 digits display 2 dashes (--).
- Graphic LAP1 (up to 9), once started, blank if not.
- S\* (< 2 sec) to start the Timer which begins counting up in increments of .01 sec.
- S\* (< 2 sec) to save that Lap's time and display the next Lap # (up to 9, then restart with 1) with the Timer continuing to count up, displaying total run time.
- A (< 2 sec) to stop the Timer and recall LAP1 (up to 9) flashing with it's time (Fig. 20). Repeat to recall other Lap times.
- A (2 sec) to reset total run time to 0:00\_00.
- S\* (2 sec) to step back to the Chrono Lead-in.
- L (< 2 sec) to toggle the Backlight On/Off. Will be On for the duration time set.
- L (2 sec), while the Backlight is On, to reset the timer to keep it On for the full duration time set.

\*Chrono operations are blocked when S is operated during a alarm strike.



Fig. 18 - CHRONO LEAD-IN



Fig. 19A - CHRONO STATUS (just started)



Fig. 19B - CHRONO STATUS (running)



If no dive is conducted within 2 hours after accessing Free Mode, operation will revert to Watch Main Time.

Operation will also revert from Free Surface Mode to Watch Main Time 2 hours after completion of a dive or if M is pressed (for 2 seconds) while viewing Free Surface Main.

# SURFACE MODE

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#### SURFACE MODE

Surface Main is the default screen displayed while in FREE Mode. In addition to Surface Interval Time and Dive Number, a CDT (Countdown Timer) is displayed (unless it is set Off) which you can start, stop, and reset.

Like Watch mode, you can access a sequence of selections including >>

ALTs (additional data), Countdown Timer, Set Alarms, Set Utilities, Serial Number, and Chronograph.

The CDT is separate from the one featured in Watch Mode.

The Chronograph is the same one as Watch Mode with it's operations carrying over between the two modes.

Button operations >>

- A (< 2 sec) to step forward through the sequence of selections.
- M (< 2 sec) to step back through selections.
- M (2 sec, any time) to revert to Surface Main.
- No button action (2 min) revert to Surface Main.
- L to activate the Backlight.

Descent to the DSD (Dive Start Depth) set for 1 second will activate Dive Mode, which will be displayed in the background if the Chrono is on display. Setting the DSD (for 2, 4, or 6 FT; or 0.6, 1.2, or 1.8 M) is explained later in the Set Utilities section.

Upon ascent to 2 FT (0.6 M) for 1 second, the Dive Main will remain on display until the BDSI (Between Dive Surface Interval) time set elapses then the Surface Main will be displayed. Setting the BDSI (up to 1 minute) is explained later in the Set Utilities section.

When set On, the SRT (Surface Recovery Time) alarm will sound and flash a message when the Surface Interval after surfacing reaches the time set. Setting the SRT alarm (up to 30 minutes) is explained later in the Set Alarms section.

When 2 hours elapse after surfacing, operation will revert to Watch Mode. M (2 sec) will access or return from Watch Mode.

#### SURF MAIN, information includes (Fig. 21A/B):

- > Graphic FREE, or CDT (min:sec) with icons.
- > Surface Interval Time (hr:min\_sec) with SURF and sec icons.
- > Number of the last dive conducted that calendar day with DIVE icon. If no dive has been made yet that day, or if Dive # is reset by A+S (2 sec), 0 will be displayed.
- > Battery icon, if a Low Battery condition.
- A (< 2 sec) to access SURF ALT 1, and step forward through the sequence of selections.
- A (2 sec) to access Log/History.
- A + S (2 sec) to reset Dive # to 0.
- M (< 2 sec) to access Chrono Lead-in, and step back through the group sequence.
- M (2 sec) to access Watch Main.
- S (< 2 sec) to start\*/stop CDT. \* When the CDT is set for Auto, it will reset and repeat the countdown when it reaches 0:00.
- S (2 sec) to reset the CDT to the time set.
- L (< 2 sec) to toggle the Backlight On/Off. Will be On for the duration time set.
- L (2 sec), while the Backlight is On, to reset the timer to keep it On for the full duration time set.

#### SURF ALT 1, information includes (Fig. 22):

- > Graphic LAST, indicating data is from the last dive.
- > Max Depth with MAX and FT (or M) icons. Dashes if no previous dive conducted.
- > Elapsed Dive Time (min:sec) with DIVE and min\_sec icons. Dashes if no previous dive conducted.
- A (< 2 sec) to step forward to ALT 2.
- M (< 2 sec) to step back to SURF MAIN.
- Reverts to Main in 10 seconds if A or M is not pressed.
- L (< 2 sec) to toggle the Backlight On/Off. Will be On for the duration time set.
- L (2 sec), while the Backlight is On, to reset the timer to keep it On for the full duration time set.

#### SURF ALT 2, information includes (Fig. 23):

- > Day of Week graphic.
- > Time of Day (hr:min\_sec) with AM (or PM) icon if 12 Hour Format, no icon if 24 Hour.
- > Temperature with °F (or °C).
- A (< 2 sec) to step forward to CDT.
- M (< 2 sec) to step back to ALT 1.</li>
- Reverts to Main in 10 seconds if A or M is not pressed.
- L (< 2 sec) to toggle the Backlight On/Off. Will be On for the duration time set.
- L (2 sec), while the Backlight is On, to reset the timer to keep it On for the full duration time set.



Fig. 21A - SURF MAIN (no dive yet, CDT Off)



Fig. 21B - SURF MAIN (CDT running)





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#### FREE CDT (COUNTDOWN TIMER)

The FREE Mode CDT (which is not the same one as the Watch CDT) counts down time values in minutes:seconds.

Unless it is set Off, it is displayed on the Surface Main and if a dive is started it will be displayed on the Dive Main.

When set for Auto, the countdown will keep repeating after counting down to 0:00 until stopped by S (< 2 sec).

**CDT Lead-in**, information includes (Fig. 24):

- > Graphics Go To and Cdt with icon.
- S (< 2 sec) to access CDT Setup.
- A (< 2 sec) to step forward to Set Alarms Lead-in.</li>
- M (< 2 sec) to step back to SURF ALT 2.
- M (2 sec), or 2 minutes of no button action, will revert to SURF MAIN.
- L (< 2 sec) to toggle the Backlight On/Off. Will be On for the duration time set.
- L (2 sec), while the Backlight is On, to reset the timer to keep it On for the full duration time set.
- **CDT Setup,** information includes (Fig. 25A/B/C):
- > Countdown Time (min:sec) as >>
  - 0:00 if no time has been set, or it completed the countdown; or min:sec set if Off (or Auto) and ready to start; or -
  - min:sec remaining if On (or Auto) with a countdown in progress.
- > Graphic Cdt.
- > Graphic OFF (or ON, or Auto) flashing (Fig. 25A).
- A (< 2 sec) to step forward through selections of OFF, ON, AUTO (Fig. 25B), and SET (Fig. 25C).
- M (< 2 sec) to step back through the selections.
- S (< 2 sec) to save the selection. >> If OFF, ON, or AUTO is selected, operation reverts to the Lead-in screen. >> If SET is selected, the Set CDT screen is displayed.
- S (2 sec) to revert to CDT Lead-in, if no setting change.
- M (2 sec), or 2 minutes of no button action, will revert to SURF MAIN. L (< 2 sec) to toggle the Backlight On/Off. Will be On for the duration time set.
- L (2 sec), while the Backlight is On, to reset the timer to keep it On for the full duration time set.

#### Set CDT, information includes (Fig. 26):

- > Timer setting (min:sec) with icons, with Minute digits flashing.
- > Graphics Cdt and SEt.
- A (hold) to scroll upward through Minute set points (8/sec) from 0: to 59: in increments of 1: (min).
- A (< 2 sec) to step upward through Minute set points.
- M (< 2 sec) to step back through set points.
- S (< 2 sec) to save the Minute setting and flash the Seconds digits.
- A (hold) to scroll upward through Seconds set points (8/sec) from :00\* to :59 in increments of :01 (sec).

\*Starts at :30 (sec) minimum when Minutes are set for 0: (min).

- A (< 2 sec) to step upward through Seconds set points.
- M (< 2 sec) to step back through set points one at a time.
- S (< 2 sec) to save the CDT setting and revert to the CDT Status screen with SEt flashing, allowing ON or OFF to be selected as previously described.
- S (2 sec) to revert to CDT Setup, if no setting change.
- M (2 sec), or 2 minutes of no button action, will revert to SURF MAIN.
- L (< 2 sec) to toggle the Backlight On/Off. Will be On for the duration time set.
- L (2 sec), while the Backlight is On, to reset the timer to keep it On for the full duration time set.



Fig.24 - CDT LEAD-IN



(upon access)



Fig. 25B - CDT SETUP (upon access)



Fig. 25C - CDT SETUP (to access Set)





#### SURFACE SET MODES

To access: SURF MAIN >> ALT 1 >> ALT 2 >> CDT >> SET ALARMS >> SET UTILITIES.

- A (< 2 sec) to access and step through the sequence.
- > Set points can also be changed using the AERIS Computer Interface program.
- > Settings remain at the values saved until changed.

#### SET ALARMS

Sequence: Lead-in >> AUD >> SRT >> RTI >> RDI >> DA1 to DA6.

• A (< 2 sec), while viewing CDT Lead-in, to access Set Alarms Lead-in.

The Set Audible feature provides complete OFF control of the Audible and its associated LED warning light. When set OFF, no beeps will be emitted and the light will not flash when an alarm condition occurs, which some divers prefer during select activities. Icons and messages will still flash and the Backlight will still come On.

The SRT (Surface Recovery Time) Alarm provides an alert when a set 'recovery time' has elapsed after surfacing from a dive.

The RTI (Repeating Time Interval) Alarm repeats each time the Time Interval set is reached during operation in Dive Mode.

The RDI (Repeating Depth Interval) Alarm repeats each time the Depth Interval set is reached, except when the DA alarms strike. If a series of descents, ascents, descents is made, the alarm will activate during each of the Descents.

The DA 1 to DA6 (Descending/Ascending) Depth Alarms are set and operate with no restrictions (such as sequence) while ascending as well as descending. Unless set Off, the audible sounds for the number of beeps set for that depth each time you reach (pass through) the Depth set while descending and/or ascending.

At any time while entering settings -

- M (2 sec), or 2 minutes of no button action, will revert to SURF MAIN.
- L (< 2 sec) to toggle the Backlight On/Off. Will be On for the duration time set.
- L (2 sec), while the Backlight is On, to reset the timer to keep it On for the full duration time set.

#### Set Alarms Lead-in, information includes (Fig. 27):

- > Graphics Go To SEt A.
- S (< 2 sec) to access Set Audible.
- A (< 2 sec) to step forward to Set Utilities Lead-in.</li>
- M (< 2 sec) to step back to CDT Lead-in.

#### Set Audible Alarm, information includes (Fig. 28):

- > Graphic AUD.
- > Graphic ON (or OFF), flashing.
- A or M (< 2 sec) to toggle between ON and OFF.
- S (2 sec) to step back to Set Alarms Lead-in.
- S (< 2 sec) to save the setting and access Set SRT Alarm.

#### Set SRT (Surface Recovery Time) Alarm, information includes (Fig. 29):

- > Graphic SRT with min\_sec icons.
- > Time (min:sec).
- > Graphic ON (or OFF), flashing.
- A (< 2 sec) to step forward through the selections of OFF, ON, and SET.
- M (< 2 sec) to step back through the selections.</li>
- S (2 sec) to step back to Set Audible.
- S (< 2 sec) to save the setting.

If OFF or ON is saved, operation will advance to Set RTI Alarm.
 If SET is saved, the Minute digits will flash.

- A (hold) to scroll upward through the Minute set points at a rate of 8 per second from 0: to 30: in increments of 1 minute.
- A (< 2 sec) to step upward through the Minute set points one at a time.</li>
- M (< 2 sec) to step back through the Minute set points one at a time.
- S (2 sec) to step back to SEt flashing.
- S (< 2 sec) to save the Minute setting and flash the Seconds digits.
- A (hold) to scroll upward through the Second set points at a rate of 8 per second from :00\* to :59 in increments of 1 second. \*Starts at :01 (sec) minimum when Minutes are set for 0: (min).
- A (< 2 sec) to step upward through the Second set points one at a time.
- M (< 2 sec) to step back through the Second set points one at a time.
- S (2 sec) to step back to the Minutes digits flashing.
- S (< 2 sec) to save the min:sec setting (digits solid) and flash the graphic SEt allowing ON or OFF to be selected/saved.



Fig. 27 - SET ALARMS LEAD-IN



ALARM



Fig. 29 - SET SRT ALARM

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#### Set RTI (Repeating Time Interval) Alarm, information includes (Fig. 30):

- > Graphic RTI with min\_sec icons.
- > Time (min:sec).
- > Graphic ON (or OFF), flashing.
- A (< 2 sec) to step forward through the selections of OFF, ON, and SET.
- M (< 2 sec) to step back through the selections.
- S (2 sec) to step back to Set SRT.
- S (< 2 sec) to save the setting.
  - > If OFF or ON is saved, operation will advance to Set RDI Alarm.
  - > If SET is saved, the Minute digits will flash.
- A (< 2 sec) to step upward through the Minute set points from 0: to 9: one at a time.
- M (< 2 sec) to step back through the Minute set points one at a time.
- S (2 sec) to step back to SET flashing.
- S (< 2 sec) to save the Minute setting and flash the Seconds digits.
- A (hold) to scroll upward through the Second set points at a rate of 8 per second from :00\* to :59 in increments of 1 second.
- \*Starts at :10 (sec) minimum when Minutes are set for 0: (min).
- A (< 2 sec) to step upward through the Second set points one at a time.
- M (< 2 sec) to step back through the Second set points one at a time.
- S (2 sec) to step back to Minutes digits flashing
- S (< 2 sec) to save the min:sec setting (digits solid) and flash the graphic SEt allowing ON or OFF to be selected/saved.

#### Set RDI (Repeating Depth Interval) Alarm, information includes (Fig. 31):

- > Graphic RDI.
- > Depth interval with FT (or M) icon.
- > Graphic ON (or OFF), flashing.
- A (< 2 sec) to step forward through the selections of OFF, ON, and SET.
- M (< 2 sec) to step back through the selections.
- S (2 sec) to step back to Set RTI Alarm.
- S (< 2 sec) to save the setting.
  - > If OFF or ON is saved, operation will advance to Set DA1 Alarm.
  - > If SET is saved, the Depth digits will flash.
- A (hold) to scroll upward through the Depth set points at a rate of 8 per second from 10 to 100 FT (3 to 33 M) in increments of 1 FT (1 M).
- A (< 2 sec) to step upward through the set points one at a time.
- M (< 2 sec) to step back through the set points one at a time.
- S (2 sec) to step back to SET flashing.
- S (< 2 sec) to save the setting (digits solid) and flash the graphic SEt allowing ON or OFF to be selected/saved.

#### Set DA1 Depth Alarm (DA2 to DA6 similar), information includes (Fig. 32):

- > Graphic DA1.
- > Depth with FT (or M) icon.
- > Set point ON (or OFF), flashing.
- A (< 2 sec) to step forward through the selections of OFF, ON, and SET.
- M (< 2 sec) to step back through the selections.
- S (2 sec) to step back to Set RDI Alarm.
- S (< 2 sec) to save the setting.
- > If OFF or ON is saved, operation will advance to Set DA2 Alarm.
- > If SET is saved, the Depth digits will flash.
- A (hold) to scroll upward through the Depth set points at a rate of 8 per second from 10 to 495 FT (3 to 150 M) in increments of 1 FT (1 M).
- A (< 2 sec) to step upward through the Depth set points one at a time.
- M (< 2 sec) to step back through the Depth set points one at a time.
- S (2 sec) to step back to SEt flashing.
- S (< 2 sec) to save the Depth setting and display the Set DA1 Audible screen.



Fig. 30 - SET RTI ALARM





/saved.



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#### Set DA1 Audible Alarm (DA2 to DA6 similar), information includes (Fig. 33):

- > Graphics DA1 and bEEP.
- > Number of beeps (1 to 10), flashing upon access.
- > Number of times the beeps are to repeat (1t to 3t, t = times).
- A (< 2 sec) to step upward through the Beep set points from 1 to 10 one at a time.
- M (< 2 sec) to step back through the Beep set points one at a time.
- S (2 sec) to step back to Depth digits flashing.
- S (< 2 sec) to save the Beep setting and flash the t (number of times) digit.
- A (< 2 sec) to step upward through the t (times) set points from 1t to 3t one at a time.
- M (< 2 sec) to step back through the t (times) set points one at a time.
- S (2 sec) to step back to Beep digits flashing.
- S (< 2 sec) to save the Audible setting (digits solid) and flash the graphic SEt allowing ON or OFF to be selected/saved...

#### **SET UTILITIES**

Sequence: Lead-in >> Units >> Wet Activ >> Water Type >> Backlight Duration >> Auto Glo >> Sampling Rate >> DSD >> BDSI.

• A (< 2 sec), while viewing Set Alarms Lead-in, to access Set Utilities Lead-in.

The Wet Activation feature allows you to disable activation of Dive Mode during activities when you only want to use the Watch features and don't want diving information displayed or recorded.

The Water Type selection determines Depth calibration to accomodate activities in fresh or sea/salt water.

The Backlight Duration determines how long the Backlight will be On when activated by pressing the Light (L) button.

When Auto Glo is set On, the Backlight will activate automatically upon entry into Dive Mode and remain On until the BDSI time (up to 1 min) elapses after surfacing. L button operation of the Backlight will be disabled during the dive, then enabled on the surface.

Sampling Rate determines the interval at which data is sampled and recorded for upload to the Computer Interface program. It does not affect the rate at which data is measured for the display (which is at fixed 1 second rate).

The DSD (Dive Start Depth) feature allows you to select the Depth at which Dive Mode will be activated upon descent. Regardless of the DSD set, every dive ends upon ascent above 2 FT (0.6 M) for the BDSI set.

The BDSI (Between Dive Surface Interval) feature allows you to select the time interval between surfacing and descending that determines whether the descent is a new dive. Short intervals may be preferred for some activities and longer intervals for others, thus a selection may be helpful.

At any time while entering settings -

- M (2 sec), or 2 minutes of no button action, will revert to SURF MAIN.
- L (< 2 sec) to toggle the Backlight On/Off. Will be On for the duration time set.
- L (2 sec), while the Backlight is On, to reset the timer to keep it On for the full duration time set.

#### Set Utilities Lead-in, information includes (Fig. 34):

- > Graphics Go To SEt U.
- S (< 2 sec) to access Set Units.
- A (< 2 sec) to step forward to ID-SN.
- M (< 2 sec) to step back to Set Alarms Lead-in.

#### Set Units, information includes (Fig. 35):

- > Graphic UNIT.
- > FT icon and °F (or M and °C), flashing.
- A or M (< 2 sec) to toggle between Imperial (FT, F) and Metric (M, C).
- S (2 sec) to step back to Set Utilities Lead-in.
- S (< 2 sec) to save the setting and access Set Wet Activation.



Fig. 34 - SET UTILITIES



Fig. 35 - SET UNITS



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#### Set Wet Activation, information includes (Fig. 36):

- > Graphics WET ACt.
- > Graphic ON (or OFF), flashing.
- A or M (< 2 sec) to toggle between ON and OFF.
- S (2 sec) to step back to Set Units.
- S (< 2 sec) to save the setting and access Set Water Type.

#### Set Water Type, information includes (Fig. 37):

- > Graphics H2O tYPE.
- > Graphic SEA (or FrSH), flashing.
- A or M (< 2 sec) to toggle between SEA and FrSH.
- S (2 sec) to step back to Set Wet Activation.
- S (< 2 sec) to save the setting and access Set Backlight Duration.

#### Set Backlight Duration, information includes (Fig. 38):

- > Graphics GLO and durA.
- > Time (min:sec) flashing, with icons.
- A (< 2 sec) to step upward through set points of 0:05, 0:10, 0:30, 1:00 (min:sec) one at a time.
- M (< 2 sec) to step back through the set points one at a time.
- S (2 sec) to step back to Set Water Type.
- S (< 2 sec) to save the setting and access Set Auto Glo.

#### Set Auto Glo, information includes (Fig. 39):

- > Graphics AUTO GLO with DIVE icon.
- > Graphic ON (or OFF), flashing.
- A or M (< 2 sec) to toggle between ON and OFF.
- S (2 sec) to step back to Set Backlight Duration.
- S (< 2 sec) to save the setting and access Set Sampling Rate.

#### Set Sampling Rate, information includes (Fig. 40):

- > Graphic SAMP.
- > Time (sec), flashing, with icon.
- A (< 2 sec) to step upward through set points of 0.25, 0.50, 1.00, 2.00 (sec) one at a time.
- M (< 2 sec) to step back through the set points one at a time.
- S (2 sec) to step back to Set Auto Glo.
- S (< 2 sec) to save the setting and access Set DSD.

#### Set DSD (Dive Start Depth), information includes (Fig. 41):

- > Graphic DSD.
- > Depth flashing, with FT (or M) icon.
- A (< 2 sec) to step upward through the set points of 2, 4, 6 FT (0.6, 1.2, 1.8 M) one at a time.
- M (< 2 sec) to step back through set points one at a time.
- S (2 sec) to step back to Set Sampling Rate.
- S (< 2 sec) to save the setting and access Set BDSI.

#### Set BDSI (Between Dive Surface Interval), information includes (Fig. 42):

- > Graphic BDSI with min & sec icons.
- > Time (min:sec) flashing, with SURF icon.
- A (hold) to scroll upward through the set points 8 per second from 0:01 to 1:00 (min:sec) in increments of :01 (1 sec).
- A (< 2 sec) to step upward through the set points one at a time.
- M (< 2 sec) to step back through the set points one at a time.
- S (2 sec) to step back to Set DSD.
- S (< 2 sec) to save the setting and revert to Set Utilities Lead-in.







Fig. 38 - SET BACKLIGHT DURATION





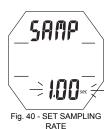




Fig. 41 - SET DSD



Fig. 42 - SET BDSI

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#### SERIAL NUMBER (SN)

• A (< 2 sec), while viewing Set Utilities Lead-in, - to access the Serial Number screen.

Information includes (Fig. 43):

- > Graphic SN.
- > Factory programmed Serial Number (up to 6 digits).
- > Firmware (the unit's operating software) revision number (e.g., graphic r1A).
- A (< 2 sec) to step forward to Chrono Lead-in.
- M (< 2 sec) to step back to Set Utilities Lead-in</li>
- M (2 sec), or 2 minutes of no button action, will revert to SURF MAIN.
- L (< 2 sec) to toggle the Backlight On/Off. Will be On for the duration time set.
- L (2 sec), while the Backlight is On, to reset the timer to keep it On for the full duration time set.

## This information will be required if a unit is sent to AERIS for evaluation or service. Record it in the table provided in the back of this manual, and retain the sales receipt.

#### CHRONOGRAPH

The Chrono in FREE Mode is the same one used in Watch Mode and it carries over between modes when it is in operation.

Refer to Watch Mode (page 12) for details and displays.

Chrono Lead-in, information includes (Fig. 44):

- > Graphics Go To CHro.
- S (< 2 sec) to access Chrono Status.
- A (< 2 sec) to step forward to SURF MAIN.</li>
- M (< 2 sec) to step back to SN.
- M (2 sec), or 2 minutes of no button action, will revert to SURF MAIN.
- L (< 2 sec) to toggle the Backlight On/Off. Will be On for the duration time set.
- L (2 sec), while the Backlight is On, to reset the timer to keep it On for the full duration time set.



Fia. 43 - SN

#### LOG & HISTORY MODES

• A (2 sec), while Watch Main Time or FREE SURF Main is displayed, will access and step through Log and History modes.

Sequence: Main >> Day Log >> Full Log >> Day History >> Full History.

Day and Full Logs display information from the latest 99 dives.

The difference between the modes is that the information in Day Log is only retained until a dive is conducted on a new calendar day, or the Dive # is reset to #1 (by A+S while viewing the SURF Main) at which time all data is deleted from the Day Log.

Full Log retains information until it is overwritten due to storage capacity.

After exceeding 99 dives, the most recent Dive will be recorded in the Full Log while deleting the oldest. It is highly unlikely that this will affect the Day Log which will do the same if 99 is exceeded.

Dives are numbered 1 to 99. Numbering starts at #1 each new calendar day beginning after midnight, or when Reset (by A+S while viewing the SURF Main).

In the event that a dive's EDT exceeds 59:59 (min:sec), the data at the 59:59 interval will be recorded for the Log and History upon surfacing of the unit.

History records information accumulated during the most recent day and adds that information to a full (all time) record.

Battery replacement will not to delete Log or History data.

At any time while in Log or History modes -

- M (2 sec) at any time while, or 2 minutes of no button action, will revert to the Watch Main or SURF MAIN screen.
- L (< 2 sec) to toggle the Backlight On/Off. Will be On for the duration time set.
- L (2 sec), while the Backlight is On, to reset the timer to keep it On for the full duration time set.

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#### DAY LOG LEAD-IN, information is to include (Fig. 45):

- > Graphics Go To dAY LOG with Log (book) icon.
- A (2 sec) to step forward to Full Log Lead-in.
- M (2 sec) to step back to Watch Main or SURF MAIN
- A (< 2 sec) to access Day Log Data 1.

#### DAY LOG DATA 1, information is to include (Fig. 46):

- > Log (book) icon.
- > Graphic No and dive number (1 to 99) for that calendar day, or session of the day if reset.
- > Time of Day that the dive began (hr:min\_sec) with AM (or PM) icon.
- > Date the dive was conducted, that it began (m.d or d.m).
- S (hold) to scroll through previous dives' Data 1 screens (4/sec), repeat after last.
- S (< 2 sec) to step through previous dives' Data 1 screens one at a time.
- M (< 2 sec) to step back through previous dives' Data 1 screens one at a time.
- A (< 2 sec), at any time, to access the Data 2 screen for that same dive.
- A (2 sec), at any time, to exit and revert to Day Log Lead-in.

#### DAY LOG DATA 2, information is to include (Fig. 47):

- > Log Mode (book) icon.
- > Graphic No and dive number (1 to 99) for that calendar day, or session of the day if reset.
- > Pre dive Surface Interval time (hr:min\_sec) with SURF and sec icons, blank if Dive # 1.
- > Temperature (lowest recorded during the dive) with DIVE and ° icon and graphic F (or C).
- S (hold) to scroll through previous dives' Data 2 screens (4/sec), repeat after last.
- S (< 2 sec) to step through previous dives' Data 2 screens one at a time.</li>
- M (< 2 sec) to step back through previous dives' Data 2 screens one at a time.
- A (< 2 sec), at any time, to access the Data 3 screen for that same dive.
- A (2 sec), at any time, to exit and revert to Day Log Lead-in.

#### DAY LOG DATA 3, information is to include (Fig. 48):

- > Log Mode (book) icon.
- > Graphic No and dive number (1 to 99) for that calendar day, or session of the day if reset.
- > Max Depth with MAX and FT (or M) icons.
- > Elapsed Dive Time (min:sec) with DIVE and min\_sec icons.
- S (hold) to scroll through previous dive's Data 3 screens (4/sec), repeat after last.
- S (< 2 sec) to step through previous dive's Data 3 screens one at a time.
- M (< 2 sec) to step back through previous dive's Data 3 screens one at a time.
- A (< 2 sec), at any time, to access the Data 4 screen for that same dive.
- A (2 sec), at any time, to exit and revert to Day Log Lead-in.

#### DAY LOG DATA 4 (Profile)

The Log 4 screen allows dives to be analyzed on site without use of the Computer Interface system showng Depth as it changes while EDT is increased or decreased throughout that dive, beginning at descent (0:01 sec).

During dives, Depth and EDT are recorded every second beginning upon descent to the Dive Start Depth set and ending upon ascent to < 2 FT (0.6 M).

#### DAY LOG DATA 4, information is to include (Fig. 49):

- > Log Mode (book) icon.
- > Graphic No and dive number (1 to 99) for that calendar day, or session of the day if reset.
- > Depth as 0 with FT (or M) icon and graphic At (meaning 'depth at' the time shown).
- > Elapsed Dive Time as 0:00 (min:sec) with DIVE and min\_sec icons.
- S (hold) to start EDT which will increase at a rate of 8 seconds EDT for each real time second until S is released, displaying the Depth values for each EDT value.
- S (< 2 sec) to start/stop EDT which will automatically increase at a rate of 1 second EDT for each real time second.
- M (< 2 sec) to decrease EDT 1 second for each press/release.
- A (< 2 sec), at any time, to revert back to the Data 1 screen for that dive.
- A (2 sec), at any time, to exit and revert to Day Log Lead-in.







Fig. 47 - DAY LOG DATA 2



Fig. 48 - DAY LOG DATA 3



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#### FULL LOG LEAD-IN, information is to include (Fig. 50):

- > Graphics Go To FULL LOG with Log (book) icon.
- A (2 sec) to step forward to Day History Lead-in.
- M (2 sec) to step back to Day Log Lead-in
- A (< 2 sec) to access Full Log Data 1.

#### Full Log Data screens and button operations are the same as those previously described for Day Log.

DAY HISTORY LEAD-IN, information is to include (Fig. 51):

- > Graphics Go To, dAY, and HiST, solid.
- A (2 sec) to step forward to Full History Lead-in.
- M (< 2 sec) to step back to Full Log Lead-in.
- A (< 2 sec) to access Day History Data 1.

#### DAY HISTORY DATA 1, information is to include (Fig. 52):

- > Graphic DAY.
- > Total accumulated EDT for that day starting at 0:00\_01 (hr:min\_sec) up to 23:59\_59 (hr:min\_sec) with sec icon.
- > Total number of dives conducted for that calendar day, or session of the day if reset.
- A (< 2 sec) to access Day History Data 2.
- A (2 sec), at any time, to exit and revert to Day History Lead-in.

#### **DAY HISTORY DATA 2,** information is to include (Fig. 53):

- > Graphic DEEP indicating that the information displayed is for the deepest depth recorded that day and the Dive Time displayed is associated with that Max Depth.
- > Max Depth achieved that day with MAX and FT (or M) icons.
- > Dive Time (min:sec) for that dive, with DIVE and min\_sec icons.
- A (< 2 sec) to access Day History Data 3.
- A (2 sec), at any time, to exit and revert to Day History Lead-in.

#### DAY HISTORY DATA 3, information is to include (Fig. 54):

- > Graphic LONG indicating that the information displayed is for the longest Dive Time recorded that day and the Max Depth displayed is associated with that Dive Time.
- > Max Depth for the dive with MAX and FT (or M) icons, and graphic At (meaning 'depth at').
- > Dive Time (min:sec) for that dive, with DIVE and min\_sec icons.
- A (< 2 sec) to access Day History Data 4.
- A (2 sec), at any time, to exit and revert to Day History Lead-in.

DAY HISTORY DATA 4, information is to include (Fig. 55):

- > Graphic AVE indicating that the data displayed represents Averages for all dives conducted during that calendar day, or session of the day if reset.
- > Max Depth with MAX and FT (or M) icons.
- > Dive Time (min:sec) with DIVE and min\_sec icons.
- A (< 2 sec) to revert back to the Data 1 screen for that dive.
- A (2 sec), at any time, to exit and revert to Day History Lead-in.



Fig. 50 - FULL LOG LEAD-IN

Fig. 51 - DAY HISTORY LEAD-IN







Fig. 53 - DAY HISTORY DATA 2





Fig. 55 - DAY HISTORY DATA 4

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## AERIS

#### F11 OPERATING MANUAL

#### FULL HISTORY LEAD-IN, information is to include (Fig. 56):

- > Graphics Go To, FULL, and HiST, solid.
- A (2 sec) to step forward to Watch or SURF Main.
- A (< 2 sec) to access Full History Data 1.

#### **FULL HISTORY DATA 1,** information is to include (Fig. 57):

- > Graphic TOTL, indicating that the information displayed is for the total number of dives and total Dive Time recorded.
- > Total accumulated Dive Time (up to 9999) with graphic Hr, then starting over at 0001.
- > Total number of dives ever conducted (up to 9999) with DIVE icon.
- A (< 2 sec), at any time, to access Full History Data 2.
- A (2 sec), at any time, to exit and revert to Full History Lead-in.

FULL HISTORY DATA 2, information is to include (Fig. 58):

- > Graphic EVER, indicating that the information displayed is for the deepest Max Depth ever recorded and the Dive Time is associated with that Max Depth.
- > Max Depth with MAX and FT (or M) icons.
- > Dive Time (min:sec) for that dive, with DIVE and min\_sec icons.
- A (< 2 sec), at any time, to access Full History Data 3.
- A (2 sec), at any time, to exit and revert to Full History Lead-in.

#### FULL HISTORY DATA 3, information is to include (Fig. 59):

- > Graphic LONG, indicating that the information displayed is for the longest Dive Time ever recorded and the Max Depth displayed is associated with that Dive Time.
- > Max Depth with MAX and FT (or M) icons, and graphic At (meaning 'depth at').
- > EDT (min:sec) with DIVE and min\_sec icons.
- A (< 2 sec), at any time, to access the Full History Data 4.
- A (2 sec), at any time, to exit and revert to Full History Lead-in.

#### FULL HISTORY DATA 4, information is to include (Fig. 60):

- > Graphic AVE, indicating that the information displayed represents Averages.
- > Max Depth with MAX and FT (or M) icons, the average Max Depth of all dives ever recorded.
- > EDT (min:sec) with DIVE and min\_sec icons, the average EDT of all dives ever recorded.
- A (< 2 sec), at any time, to access Full History Data 5.
- A (2 sec), at any time, to exit and revert to Full History Lead-in.

#### **FULL HISTORY DATA 5,** information is to include (Fig. 61):

- > Graphics AVE EACH dA, indicating that the information displayed represents Average number of dives conducted each calendar day (ever).
- > Number of dives with DIVE icon.
- A (< 2 sec), at any time, to revert to Full History Data 1.
- A (2 sec), at any time, to exit and revert to Full History Lead-in.



Fig. 56 - FULL HISTORY LEAD-IN





Fig. 58 - FULL HISTORY DATA 2



Fig. 59 - FULL HISTORY DATA 3



Fig. 60 - FULL HISTORY DATA 4



61 - FULL HISTOF DATA 5

# DIVE MODE

Dive Mode is activated upon descent to the DSD (Dive Start Depth) set for 1 second, then the dive ends upon ascent above 2 FT (0.6 M) for 1 second.

If a descent is made while the Chrono is on the display, it will remain on the display (even after a dive is started), until M is pressed/released to display the Dive Main.

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#### **DIVE MODE**

Prior to the first dive of a new series, if Wet Activation is set Off, Dive Mode will not activate during operation in any Watch Mode. It must to be in FREE Mode prior to activating Dive Mode.

If Wet Activation is set On, Dive Mode will activate from any operating surface mode including Watch modes when it senses the DSD (Dive Start Depth) set for 5 seconds.

Once the first dive of a series is completed, repetitive dives will be activated regardless of what surface operating mode it is in.

Dives start upon descent to the DSD (Dive Start Depth) set (2, 4, or 6 FT; or 0.6, 1.2, or 1.8 M) for 1 second and end upon ascent to a Depth < 2 FT (0.6 M)\*\* for the BDSI (Between Dive Surface Interval) time set, thus descending before the BDSI time elapses is the same dive and descending at => the BDSI is a new repetitive dive.

\*\*Upon ascent to < 2 FT (0.6 M), the Dive Main will display 0 FT (0.0 M) until you surface, or descent is made to the DSD set during the BDSI.

#### **Backlight**

- L (< 2 sec) to toggle the Backlight On/Off. Will be On for the duration time set.
- L (2 sec), while the Backlight is On, to reset the timer to keep it On for the full duration time set.
- If Auto Glo is set On, the Backlight will turn On upon descent to the DSD set and remain on until you surface and the BDSI time set has elapsed.

When Alarms strike, the Backlight will come On, if Off, and remain On until it is turned Off by L (< 2 sec), or it turns Off automatically after 10 seconds. If it is already On, it will remain On for 10 seconds from the time that the Alarm strikes unless you turn it Off during that 10 second time.

#### **DIVE MAIN**, information includes (Fig. 62A/B):

- > CDT (Countdown Timer, min:sec) with min\_sec and CDT icons, if set On. Blank if Off.
- > Current Depth with FT (or M) icon. 0 FT (0.0 M) when on the surface during the BDSI time set (Fig. 63).
- > Elapsed Dive Time (min:sec) with DIVE and min\_sec icons.
- A (< 2 sec) to access ALT.
- S (< 2 sec) to start/stop the CDT. If set for Auto, the countdown will repeat each time it counts down to 0:00.
- S (2 sec) to reset the CDT to the time (min:sec) set.
- M (< 2 sec) to replace the Dive Main with Chrono (Run Timer) Status which will remain on display until S (2 sec) to replace Chrono with the Dive Main.

#### CHRONO STATUS, information includes (Fig. 64):

When the Chrono is displayed, it will remain on the display until M (< 2 sec) to replace it with the Dive Main.

- Graphic CHRO with min sec icons. >
- Elapsed run time counting up to 199:59\_99 (min:sec\_ .01 sec).
- Graphic LAP1 (up to 9). >
- S (< 2 sec) - to start the Timer which counts up from 0:00\_00 (min:sec\_ .01 sec) in increments of .01 sec. After the first 4.99 seconds, the .01 sec digits display 2 dashes (--).
- S (< 2 sec) to save Lap 1's time and display the graphic LAP2 with the Timer continuing to count up. Total Run Time is always displayed until stopped.
- S (< 2 sec) to save/display other Laps up to # 9.

>> After 9 Laps, subsequent Laps continue to be recorded with the earliest being discarded, starting with #1. >> If the Chrono continues to run and total time reaches 199:59\_99, it will Stop and record that as a Lap. Subsequent presses of S then to have no effect.

A (< 2 sec) - to stop the Timer, save the lap in progress (the final lap) and total elapsed run time\*, then recall Lap 1, displaying the graphic LAP1 flashing and the Lap 1 time.

\*Total elapsed run time is the entire time from S (< 2 sec) that first started Lap 1 until A (< 2 sec) that stopped the timer and final lap.

>> Subsequent presses of A (< 2 sec) will recall the other Laps. >> When Laps are recalled, the .01 sec numerics are displayed.

- A (2 sec) to Reset the Timer to 0:00\_00 (Fig. 65).
- M (< 2 sec) to replace the Chrono screen with the Dive Main, the Chrono will continue in the background if running.

#### **DIVE ALT**, information includes (Fig. 66):

- > Day of the Week graphic (MON, TUE, etc.).
- Time of Day (hr:min\_sec) with AM (or PM) icon.

> Temperature with °F (or °C).

A (< 2 sec) - to revert to Dive Main.</li>

• Revert to Dive Main after 10 seconds if A is not pressed.











(on surface < BDSI set)





Fig. 66 - DIVE ALT

# WARNINGS

&

# ALARMS

TERIS

#### F11 OPERATING MANUAL

#### ALARMS

When the Audible sounds, the LED will flash. Also, the Backlight will come On (if Off) for 10 seconds, and a flashing icon or message will be displayed as an indication that an event is occurring and as a reminder to view the display to identify the event.

When the Audible stops, the LED will extinguish and the message will clear.

If the Audible is set OFF, it will not sound and the LED will not flash for any cautionary situation. Any icons or messages associated with the condition will still flash, and the Backlight will still come On.

#### WATCH CDT ALARM (Fig. 67)

When the Watch CDT reaches 0:00 (hr:min), the Audible will sound 3 sets of 3 beeps during which 0:00 and the CDT icon will flash on the Watch Main Time screen in place of Day of Week (or Dual Time).

#### WATCH DAILY ALARM (Fig. 68)

Each day at the time set, the Audible will sound 3 sets of 3 beeps during which the graphic ALRM will flash on the Watch Main Time screen in place of Day of Week (or Dual Time) and the alarm (speaker) icon will flash.

#### LOW BATTERY ALARM, while in Watch Mode (Fig. 69)

When a Low Battery warning condition occurs (< 2.75 volts), the Battery icon (shell with inner bar) will be displayed solid on the Watch Main Time screen.

When an Alarm condition occurs (< 2.50 volts), the graphics CHNG >> BATT will alternate on the Watch Main Time screen (each on .750 seconds, then blank .250 seconds) until the battery is changed or the unit shuts Off due to insufficient voltage.

#### FREE SURFACE CDT (COUNTDOWN TIMER) ALARM (Fig. 70)

When the CDT reaches 0:00 (min:sec), the Audible will sound during which 0:00 and the CDT icon will flash on the Surface Main.

#### FREE SURFACE SRT (SURFACE RECOVERY TIME) ALARM (Fig. 71)

When Surface Recovery Time reaches the post dive surface interval time set (min:sec), the Audible will sound 3 sets of 3 beeps during which the graphic SRT will flash on the Surface Main screen in place of the graphic FREE or the CDT (if set for use).

#### LOW BATTERY ALARM, while in FREE Mode (Fig. 72, 73)

When a Low Battery warning condition occurs (< 2.75 volts), the Battery icon (shell with inner bar) will be displayed solid on the Surface Main screen.

When an Alarm condition occurs (< 2.50 volts), the graphics CHNG >> BATT will alternate on the Surface Main for 5 seconds (each on .750 seconds, then blank .250 seconds), then operation will revert to Watch Mode with the graphics alternating on the Watch Main Time screen until the battery is changed or the unit shuts Off due to insufficient voltage.

#### FREE DIVE CDT (COUNTDOWN TIMER) ALARM (Fig. 74)

When the CDT reaches 0:00 (min:sec), the Audible will sound 3 sets of 3 beeps during which 0:00 and CDT icon will flash on the Dive Main.

#### FREE DIVE RTI (REPEATING TIME INTERVAL) ALARM (Fig. 75)

Each time the Repeating Time Interval set elapses while in Dive Mode, the Audible will sound (2) 2 second beeps during which the graphic EDT will flash on the Dive Main, in place of the CDT if in use.

#### FREE DIVE RDI (REPEATING DEPTH INTERVAL) ALARM (Fig. 76)

Each time the Repeating Depth Interval set elapses, the Audible will sound/3 sets of 3 beeps during which the graphic DPTH will flash on the Dive Main, in place of the CDT if in use. The alarm will sound even for descents made after ascents to shallower depths are made. *RDI will not sound a alarms at the DA depths set.* 

#### FREE DIVE DEPTH (DA1 to DA6) ALARMS (Fig. 77)

Each time an alarm Depth is attained, during descent and/or ascent, the Audible will sound 1, 2, or 3 sets of 1 to 10 beeps (as set) during which the graphic DA1 (or DA2 to DA6) will flash on the Dive Main, in place of the CDT if in use.





RTI ALARM

EE DIVE I ARM



Fig. 76 - FREE DIVE RDI ALARM



Fig. 77 - FREE DIVE DEPTH ALARM









Fig. 70 - FREE SURFACE



Fig. 71 - FREE SURFACE SRT ALARM



Fig. 72 - FREE SURFACE LOW BATT WARNING



Fig. 73 - FREE SURFACE LOW BATT ALARM

# REFERENCE

#### UPLOADING SETTINGS AND DOWNLOADING DATA

The F11 is configured with a Data Port located on the right side that enables it to be connected to a PC or Mac through a USB port using the AERIS Computer Interface cable, when viewing the Watch Main Time screen.

The Settings Upload portion of the Computer Interface program can be used to set/change the Main Time/Date selections, Set Alarms, and Set Utilities.

The Download portion of the program can be used to retrieve/copy data (Download it) from the F11 to the PC or Mac.

The data includes items such as dive number, surface interval time, maximum depth, elapsed dive time, start date/time, start/end depth, lowest temperature underwater, sampling rate, dive profile, and set points.

The F11 checks for the presence of an interface device connection to the Data Port once every second while operating in Watch Main Time mode. Checks are not made if the Wet Activation contacts are wet.

Upon sensing an interface connection with the PC or Mac, all segments of the LCD will be displayed. This indicates that the PC or Mac and F11 are connected and prepared for upload of settings or download of data, which is then initiated using the Computer Interface program.

Operation reverts to the Watch Main Time screen after completion of the upload or download operation, or after 2 minutes if no PC or Mac action was taken.

Prior to attempting to download data from your F11 or upload settings to it, review the Help section of the Computer Interface program which serves as its user manual. Recommended is to print those sections of Help that you consider appropriate for your interface activities.

#### PC requirements:

- IBM<sub>®</sub>, or compatible, PC with USB Port
- Intel<sup>®</sup> Pentium 4 or better microprocessor
- Microsoft<sub>®</sub> Windows<sub>®</sub> XP, Vista, 7, or 8
- Super VGA card or compatible video graphics adaptor (256 color or greater) with a minimum 800 X 600 pixel screen area of display settings
- 128MB of available RAM
- 64MB of available hard drive storage
- Mouse
- CD Rom drive
- Printer

#### Mac requirements:

- Mac with USB Port
- OSX 10.5 or later
- Super VGA card or compatible video graphics adaptor (256 color or greater) with a minimum 800 X 600 pixel screen area of display settings
- 128MB of available RAM
- 64MB of available hard drive storage
- Mouse
- Printer
- Internet connection to download App from the Apple App Store

For software updates, refer to the AERIS web site >>>>

#### www.diveaeris.com

For support, call ACI Support toll free at >>>>

(866) 732-7877, 8 Am to 5 Pm USA Pacific time.

#### WARNINGS:

Never, under any circumstances, poke any object through any slots or holes of the module. Doing so may damage the depth sensor, possibly resulting in erroneous depth displays.

If you are in doubt about the accuracy of your unit's depth readings, DO NOT attempt to dive with it until it has been inspected by AERIS.

Never pressure test the module in an air environment. Doing so may damage the depth sensor, possibly resulting in erroneous depth or time readings.

Never spray aerosols of any kind on, or near, an AERIS instrument. The propellants may chemically attack the plastic.

When a Low Battery condition is displayed prior to a dive, DO NOT attempt to dive with the unit until the battery is replaced.

#### **CARE AND CLEANING**

Protect your F11 from shock, excessive temperatures, exposure to chemicals, and tampering. Protect the lens against scratches with a Instrument Lens Protector. Small scratches will naturally disappear underwater.

- Soak and rinse the F11 in fresh water at the end of each day of diving, and check to ensure that the areas around the Low Pressure (Depth) Sensor (Fig. 78a), Computer Interface Data Port (Fig. 78b), and Buttons are free of debris or obstructions.
- To dissolve salt crystals, soak in lukewarm water or a slightly acidic bath (50% white vinegar/50% fresh water). After removal from the bath, place the F11 under gently running fresh water and towel dry before storing.
- Transport your F11 cool, dry, and protected.

#### INSPECTIONS AND SERVICE

Your F11 should be inspected annually by an Authorized AERIS Dealer who will perform a factory prescribed function check and inspection for damage or wear. To keep the 2 year limited warranty in effect, this inspection must be completed one year after purchase (+/- 30 days).

AERIS recommends that you continue to have an inspection performed every year to ensure it is working properly. The costs of annual inspections are not covered under the terms of the 2 year limited warranty.

#### **To Obtain Service:**

Take your F11 to an Authorized AERIS Dealer.

To return your F11 to AERIS:

- Record all data in the viewable Log and/or download the data in memory. All data will be erased during factory service.
- Package it using a protective cushioning material.
- Include a legible note stating the specific reason for return, your name, address, daytime phone number, serial number(s), and a copy of your original sales receipt and Warranty Registration Card.
- Send freight prepaid and insured using a traceable method to AERIS.
- If shipping to AERIS, obtain an RA (Return Authorization) number by contacting AERIS Customer Service at 510/346-0010 x764 or send an email to service2@diveaeris.com.
- Non warranty service must be prepaid. COD is not accepted.
- Additional information is available at the AERIS web site >>>>

#### diveaeris.com

#### **BATTERY REPLACEMENT**

CAUTION: The procedures that follow must be closely adhered to avoid entrance of water into the unit. Damage due to improper Battery replacement (or subsequent leakage of moisture into the unit) is not covered by the F11's 2 year warranty.

# NOTE: The F11 can be taken to an Authorized AERIS Dealer or sent to AERIS for proper battery change service which includes pressure (depth) and leak testing to the max operating depth. Standard charges for service will apply

The Battery Compartment should only be opened in a dry and clean environment with extreme care taken to prevent the entrance of moisture or dust.

As an additional precautionary measure to prevent formation of moisture in the Battery Compartment, it is recommended that the Battery be changed in an environment equivalent to the local outdoor temperature and humidity (e.g., do not change the Battery in an air conditioned environment then take it outside during a hot sunny day).

Inspect the Buttons, Lens, and Housing to ensure they are not cracked or damaged. If there is any sign of moisture in the F11, DO NOT attempt to use it for diving until it receives proper service.

#### **Data Retention**

When the battery is removed, settings and calculations for repetitive dives will be retained in volatile memory until a new battery is installed.

All parts needed for the battery change that follows are provided in the F11 Battery Kit available from your AERIS Dealer.

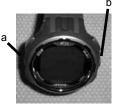


Fig. 78 - FRONT

TERIS

#### **Battery Removal**

- There is no need to remove the straps.
- Remove the (4) retaining screws located on the back of the case (Fig. 79) by turning them counter clockwise with a small flat tip 3mm screw driver.
- Carefully separate the front and back sections. If necessary, insert a small flat tip screw driver in the slot machined into the cover at the 11 o'clock position (Fig. 80a) and gently pry the cover loose, then lift it off the case (Fig. 81).
- Turn the case to one side to drop the battery into your hand. If necessary, gently loosen it with the tip of your finger (Fig. 82). DO NOT use tools to pry it out, or short the positive (+) top of the battery to the negative (-) contact under it.
- Discard the battery according to local regulations governing disposal of Lithium batteries.

#### Inspection

- Closely check all of the sealing surfaces for any signs of damage that might impair proper sealing.
- Inspect the buttons, lens, and housing to ensure they are not cracked or damaged.

## MARNING: If damage or corrosion is found, return your F11 to an Authorized AERIS Dealer, and DO NOT attempt to use it until it has received factory prescribed service.

- Remove the cover o-ring by squeezing the sides (Fig. 83a). Discard, and do not attempt to reuse it.
  - > It is located around the top rim of the cover.
  - > DO NOT use tools to remove the o-ring.
  - > To ensure proper sealing, o-ring replacement is required each time the battery is replaced.

#### **Battery Installation**

- Very lightly lubricate the new o-ring with silicone grease and place it on the top rim of the cover.
- Place a new 3 volt type CR2450 Lithium Battery, negative side down into the battery cavity (Fig. 84) and ensure that it is evenly positioned.
- Carefully position the battery cover over the battery compartment. Use the F11 logo as a guide for top/bottom. Also, small symbols have been engraved on the top of the cover and strap to serve as a guide for proper alignment (Fig. 85a).
- While ensuring that the cover and back of the case are properly aligned, firmly press them evenly and completely together.
  While holding the battery cover firmly in position against the back of the case (Fig. 86), insert the (4) retaining screws and tighten them until secure by turning them clockwise with a small flat tip 3mm screw driver. DO NOT over tighten.

#### Testing

- > Activate the unit and ensure that the LCD is clear and sharp in contrast. If any portions are missing or appear dim, or if a Low Battery condition is indicated, return the F11 to an Authorized AERIS Dealer for evaluation before use.
- > Verify all set points prior to diving.



Fig. 79 - CASE BACK



Fig. 80 - TO LOOSEN BATTERY COVER



Fig. 81 - LIFTING BATTERY COVER OFF



Fig. 82 - BATTERY REMOVAL



Fig. 83 - SQUEEZING COVER O-RING

#### ALTITUDE SENSING AND ADJUSTMENT

Prior to the first dive of a series of repetitive dives, Altitude (i.e., ambient pressure) is measured upon activation of Free Surface Mode and every 15 minutes until a dive is made or operation reverts to Main Time after 2 hours.

- > While it is operating in Watch Modes after a dive, measurements are taken every 15 minutes during the 24 hour period after surfacing.
- > Measurements are only taken when the unit is dry.
- > Two readings are taken, the second reading 5 seconds after the first. The readings must be within 1 foot (30 cm) of each other to record that ambient pressure as the current Altitude.

When diving in high altitude waters from 3,001 to 14,000 feet (916 to 4,270 meters), the F11 automatically adjusts to these conditions providing corrected Depth indication at intervals of 1,000 feet (305 meters).

No adjustments are made during any time that the Wet Contacts are bridged.

The F11 will not function as a Dive Gauge above 14,000 feet (4,270 meters).



Fig. 84 - INSTALLING BATTERY



Fig. 85 - BATTERY COVER ALIGNMENT



Fig. 86 - PRESSING FRONT & BACK TOGETHER

#### SPECIFICATIONS

#### CAN BE USED AS

- Watch
- Digital Gauge for Free Dive activity

#### WATCH MODES

- Main Time
- Alternate (supplemental information)
- Countdown Timer
- Daily Alarm
- Set Time/Date
- · Chronograph (run timer)

Set Time/Date:FactDate Format (M.D, D.M)M.DHour Format (12, 24)12Dual Time Differential (OFF, +1 to +23, -1 to - 23 hours)OFFTime of Day (hr:min)by faDate (Year, Month, Day)by fa

#### Factory Settings: M.D 12 OFF, 0 Hours by factory by factory

#### FREE SURFACE MODES

- · Surface Main
- Alternates (supplemental information)
- Countdown Timer
- Set Alarms
- Set Utilities
- Serial Number
   Chronograph (run time)
- Chronograph (run timer)

#### LOG/HISTORY MODES

- Day Log
- Full Log
- Day History
- Full History

#### SET MODES

•

Set Utilities: Units (Imperial, Metric) Wet Activation (OFF, ON) Water Type (Sea, Fresh) Backlight Duration (5, 10, 30, 60 sec) Auto Glo (OFF. ON) Sampling Rate (0.25, 0.50, 1.00, 2.00 sec) DSD (2, 4, 6 FT; 0.6, 1.2, 1.8 M) BDSI (0:01 to 1:00 min:sec) <u>Factory Settings:</u> ON OFF, 1:00 (min:sec) OFF, 0:30 (min:sec) OFF, 100 FT (33 M) All - OFF, 330 FT (100 M) All - OFF, 3 beeps 3 times

#### Factory Settings:

Imperial ON SEA 5 sec OFF 1.00 sec 4 FT (1.2 M) 1:00 (min:sec)

Serial Number

Factory set (up to 6 digits)

NUME	RIC	DISPL	<u>_AYS:</u>	

- Time of Day
- Dual Time
- Temperature
- Watch Countdown TimerChronograph (Run Timer)
- Chronograph (Run Think
- Dive Number
- Surface Interval Time
- Free Mode Countdown Timer
- Current Depth
- Maximum Depth
- Elapsed Dive Time

Range:	Resolution:
0:00_00 to 23:59_59 hr:min_sec	1 sec
0:00 to 23:59 hr:min	1 min
0 to 140°F (- 18 to 60°C)	1°
0:00 to 23:59 hr:min	1 min
0:00_00 to 199:59_99	.01 sec
min:sec01 sec	
0 to 99	1
0:00_00 to 23:59_59 hr:min_sec	1 sec
0:00 to 59:59 min:sec	1 sec
0 to 495 FT (150 M)	1 FT (0.1 M)
495 FT (150 M)	1 FT (0.1 M)
0:00 to 59:59 min:sec	1 sec



#### **SPECIFICATIONS** (continued) -

#### **OPERATIONAL PERFORMANCE**

Function:	Accuracy:
<ul> <li>Depth</li> </ul>	±1% of full scale

Timers
 1 second per day

#### Dive Counter:

- Dives 1 to 99, 0 if no dive made yet.
- Resets to Dive 1, after midnight or by A+S (2 sec).

#### **Dive Log Modes:**

- · Stores 99 most recent dives in memory for viewing.
- · After 99 dives, adds next dive in memory and deletes the oldest dive.

#### Altitude:

- Operational from Sea Level (= 0 to 3,000 feet/915 meters) to 14,000 feet (4,270 meters) elevation.
- Measures ambient pressure every 30 minutes in Watch Mode and every 15 minutes while in FREE Mode.

#### Power:

- Battery (1) 3 vdc, CR2450, Lithium battery.
- Shelf life Up to 7 years (when shipped from factory in Deep Sleep mode).
- Replacement User replaceable (annual recommended).
- Use Life 300 hours using as a Watch/Dive Gauge.
  - 25 hours using as a Dive Gauge with the Backlight on full time during dives. 1 year using as a Watch only.

#### **Battery Indicator:**

- Warning icon on solid < 2.75 volts > 2.50 volts, Battery change recommended.
- Alarm icon on flashing at <= 2.50 volts, change the Battery, will function only as a Watch.

#### **Dive Mode Activation:**

- Automatic by immersion in water and descent to Dive Start Depth set for 1 second.
- When in Watch Mode, Dive Mode will not activate if Wet Activation is set Off.
- Cannot operate in Free Dive Mode at elevations higher than 14,000 feet (4,270 meters).
- · Reverts to Watch Mode if no dive is made within 2 hours after entry into Free Surface Mode.

#### **Operating Temperature:**

- Out of the water between 20 °F and 140 °F (-6 and 60 °C).
- In the water between 28 °F and 95 °F (-2 and 35 °C).
- · At extremely low temperatures, the LCD may become sluggish, but this will not affect it's accuracy.
- >> If stored or transported in extremely low temperature areas (below freezing), you should warm the unit and its battery with body heat before diving.

#### Storage Temperature:

• Out of the water (in storage case) - between 14 °F and 158 °F (-8 and 70 °C).

#### GLOSSARY

Audible Alarm - A emitted tone that alerts the diver to potential danger.

Depth Sensor - An electro-mechanical device that converts water pressure into an electrical signal, that is converted to a visual depth display.

**Display** - A visual readout of information.

**Dive Log Mode** - A display of recorded dive information.

Elapsed Dive Time - The total time spent underwater during a dive that begins at the start depth set and ends upon ascent to the end depth.

Graphic Diver Interface \*\* - Feature of AERIS digital gauges that indicate the diver's status (icons, graphic displays).

Icon - A small pictorial representation of an operational mode or information.

LCD - Abbreviation for liquid crystal display, an easily viewed low voltage display typically found on digital dive gauges.

**Maximum Depth** - The deepest depth attained during a dive.

**Mode** - A specific set of functions in a digital gauge.

Out of Range - The point at which a dive gauge can no longer provide accurate calculations or information.

**Transducer** - An electro-mechanical device in a dive gauge that acts as a depth sensor.



- Conducting Free dives within a 24 hour period after conducting SCUBA dives, combined with the effects of multiple rapid Free Dive ascents, increases your risk of decompression sickness. Such activities may result in accelerated entry into decompression which could cause serious injury or death.
- Combining competitive type Free Dive activities that involve multiple descents/ascents with activities utilizing SCUBA during the same 24 hour period is not recommended. Presently, there is no data relating to such activities.
- It is highly recommended that anyone planning to become involved in competitive type Free dive activities obtain proper instruction and training from a recognized Free Diving trainer. It is imperative that the physiological affects be understood and the diver is physically prepared.
- If your F11 stops working for any reason while operating in Free Dive Mode, it is important that you have anticipated this possibility and are prepared for it.
- If you dive in situations where your trip would be ruined or your safety would be jeopardized by losing the use of your F11, a backup instrument system is highly recommended.

#### **INSPECTION / SERVICE RECORD**

F11 Serial Number:	
F11 Firmware Rev:	
Date of Purchase:	
Purchased from:	

Below to be filled in by an Authorized AERIS Dealer:

Date	Service Performed	Dealer/Technician

WARNING: If you do not fully understand how to use the F11 after reading this manual, or if you have any questions, you should seek instruction in its use from your Authorized AERIS Dealer before diving with it.



# F11

## **OPERATING MANUAL**