DATA SCOUT MOBILE

Handheld PC Software for the Level Scout

OPERATIONS MANUAL

C O N T E N T S

1.0 PRODUCT INTRODUCTION

1.1 DATA SCOUT MOBILE FEATURES

Data Scout Mobile is designed for handheld computers running Microsoft Windows Mobile® 2003 Operating System. It is designed to be used in conjunction with the YSI Level Scout submersible datalogging level transducer.

Key features include:

- Freely available, user friendly software

- Common "look and feel" with Data Scout

- Able to log data and configure tests in Level Scout transducers

- Extract logged data and save to a file

- Intuitive Graphical User Interface

1.2 DATA SCOUT MOBILE HARDWARE

YSI recommends the following minimum requirements:

- Microsoft Windows Mobile® 2003 Operating System

- 3 Mb of available program memory

- 2 Mb of available storage memory

- A fully implemented RS-232 serial port capable of supporting ActiveSync and interfacing with peripheral devices

Both the Data Scout Mobile software and Level Scout upgrades are available at no charge via the YSI website at www.ysi.com.

2.0 INSTALLATION AND SETUP

This chapter will provide a detailed description of how to set up and install Data Scout Mobile on a handheld device.

2.1   INSTALLING DATA SCOUT MOBILE ONTO A HANDHELD PC

The Data Scout Mobile installation application is located on the CD that was shipped with the Level Scout.

Install the Data Scout Mobile application on the handheld by performing the following:

1. Connect the handheld device to a computer that is running the ActiveSync® application.

2. Make sure that ActiveSync recognizes that the handheld device is properly connected and available.

3. Locate the DataScoutMobileSetup.exe file on the CD.

4. Double click on the DataScoutMobileSetup.exe icon to begin the installation.

5. The Install program will verify that you want to install Data Scout Mobile onto your handheld device. Confirm that this is what you wish to do by clicking the **Install** button on the setup page.

6. You will be asked to confirm the installation of three packages. If you have previously installed Data Scout Mobile then you will also be asked to confirm that packages should be re-installed. You should always install all packages included with the Data Scout Mobile application.

7. You will be asked to confirm that the application should be installed in its default location. If you decide to choose a different location for program installation please make a note of it.

8. You will be asked to check the screen of your handheld to ensure that no additional operations are required.

9. Click **Finish** when the installation completes to close the notification screen.

The Data Scout Mobile program icon may be placed in the Start Menu of your Handheld PC desktop. This procedure is recommended so that it easily accessible. Modifying the Start Menu can be accomplished with the following procedure.

1. Click on the Start Menu in the upper left hand corner of the Handheld PC desktop.

2. Click on the Settings menu item.

3. Select the Personal tab.

4. Click the Menus icon.

Windows Mobile® allows a limited number of programs to be displayed on the Start Menu. You will need to select an item to remove from the Start Menu by clearing the check box beside its name. Once this has occurred, you may place a check in the box beside Data Scout Mobile and click **OK**.

Connect the Level Scout to the handheld device and configure it via Data Scout Mobile.

2.2 CONNECTING A HANDHELD TO THE LEVEL SCOUT

Figure 1.1

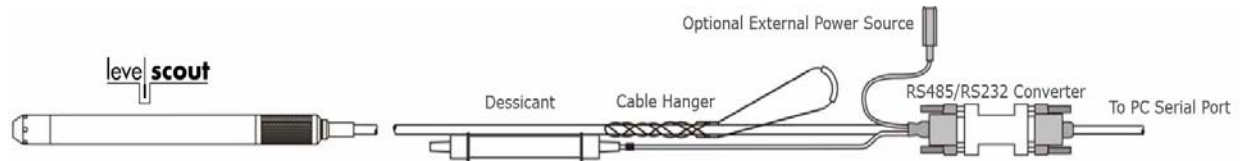> *Note:*
> The power conservation feature of the handheld device may reduce screen backlighting after a period of inactivity. However, the handheld device will not enter a low power consumption or hibernation state while Data Scout Mobile is active. Always exit Data Scout Mobile via the Transducer - Exit menu when not actively configuring transducers in order to preserve handheld battery charge.

3.0 DATA SCOUT MOBILE

This chapter will describe Data Scout Mobile's operation in order to fully utilize and configure the Level Scout. Before proceeding in this chapter, install Data Scout Desktop as described in section 2.1.

3.1   USING DATA SCOUT MOBILE

Data Scout Mobile was intended for field use. The primary function is to enable users to determine operational status, configure test profiles, and extract logged data from YSI Level Scout transducers. This application has no facility for graphing data files and does not perform firmware updates of YSI Level Scout transducers. To graph, convert files, or update the firmware, use the Data Scout Advanced application.

3.1.1 LAUNCHING DATA SCOUT MOBILE

After the installation of Data Scout Mobile has completed, all notifications will have been cleared and the Windows Mobile® desktop will appear similar to.

To start Data Scout Mobile click on the **Start** menu, **Programs** folder, and select **Data Scout Mobile**. Once the splash screen has cleared you will see the main Data Scout Mobile screen (figure 3.1).

Figure 3.1

3.1.2 DISCOVERING TRANSDUCERS

Data Scout Mobile is designed to require a minimum of user configuration in order to operate. It will present to the user all the transducers found attached to any RS-232 serial port present on the handheld device. To begin the discovery process, simply select the **Transducer** menu and then select the **Start** menu item (figure 3.2).

Figure 3.2

Figure 3.3

Verifying that transducers are connected and configuring them may take up to 90 seconds although typically there will be a 20 to 30 second delay prior to display of the information page. During this time the application is checking all possible combinations of communication parameters so that all connected transducers may be available for configuration (figure 3.3). Figure 3.4 shows a transducer's status on the information page after successful discovery. After detecting a transducer, Data Scout Mobile changes its communication rate so that data may be transferred more efficiently. The user *must* use the Transducer│Exit or Transducer│Stop menu to terminate the connection between the Level Scout and Data Scout Mobile. If this is not done, the transducer will be left at Data Scout Mobile's default operating configuration instead of its initial configuration.
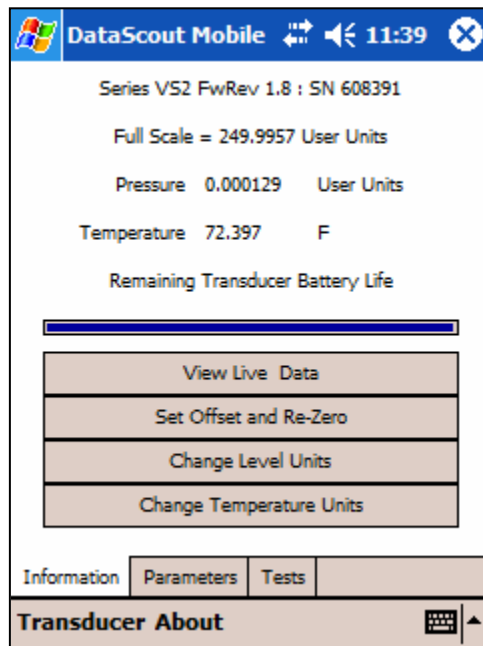

Figure 3.4

3.1.3 TRANSDUCER INFORMATION

The information page displays identification information and the current measured values for the selected transducer. The pressure and temperature data is updated at approximately 1 second intervals. There are several buttons located below the transducer information that perform functions relevant to the displayed data.

3.1.3.1 VIEW LIVE DATA

The View Live Data button raises a tabular historical display of the data visible on the information page (figure 3.5). Click the **Save** button to store the displayed historical data in a text file. The displayed history may be cleared by selecting the **Clear** button. Selecting the **Hide Live Data** button returns the program to the Information page.
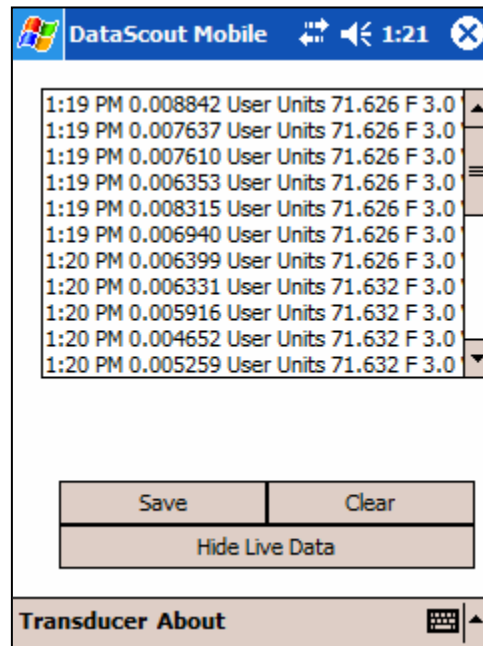

Figure 3.5

3.1.3.2 SET OFFSET AND RE-ZERO

Transducers may require periodic adjustment to correct for drift associated with aging and the environment. In addition, users may wish to adjust a transducers output to a common reference point in order to more easily correlate data from multiple sites. The **Set Offset and Re-Zero** button performs these adjustments on the Level Scout transducers. Once the Re-Zero Transducer page is visible, one of two options must be selected prior to proceeding (figure 3.6).
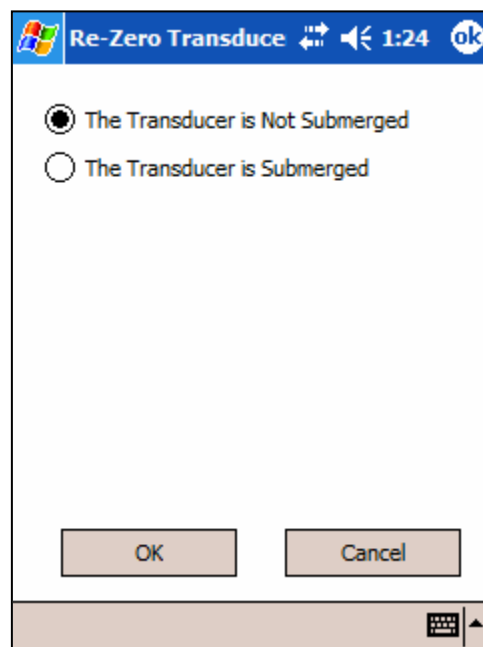

Figure 3.6

If the transducer simply needs to be adjusted for zero drift and the transducer is not yet installed under water, then select the **Not Submerged** option and acknowledge the choice using the **OK** button. Do not perform this function if using an Absolute Level Scout. Absolute Level Scouts should read atmospheric pressure in air, not zero.

If the transducer needs to be adjusted to a known value, then select the **Submerged** option. When the selected option is changed a data box will appear allowing direct entry of a corrected value in the currently selected unit of measure (figure 3.7). When the change is acknowledged using the **OK** button, the transducer will adjust its offset to indicate the new reading.
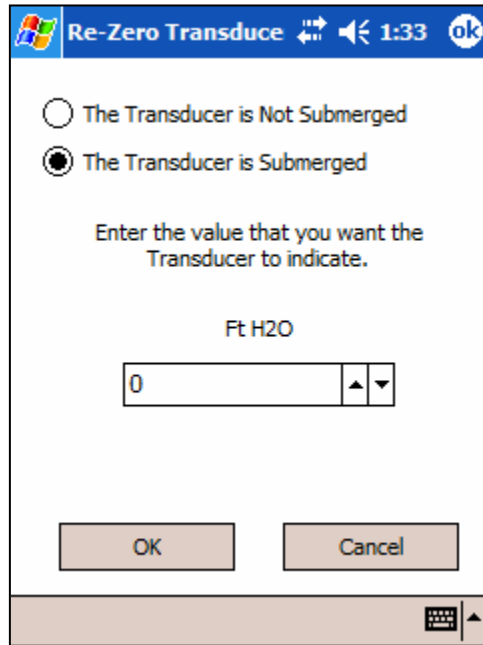
Figure 3.7

After performing either of these operations the **Information** page will re-appear and the pressure value can be verified to have been corrected by examining the Pressure Data.

3.1.3.3 CHANGE LEVEL UNITS

Clicking on the **Change Level Units** button will present the **Select Level Units Page** (figure 3.8). On this page you may select one of the included measurement units or insert a scale factor that will convert from PSI to the desired units.
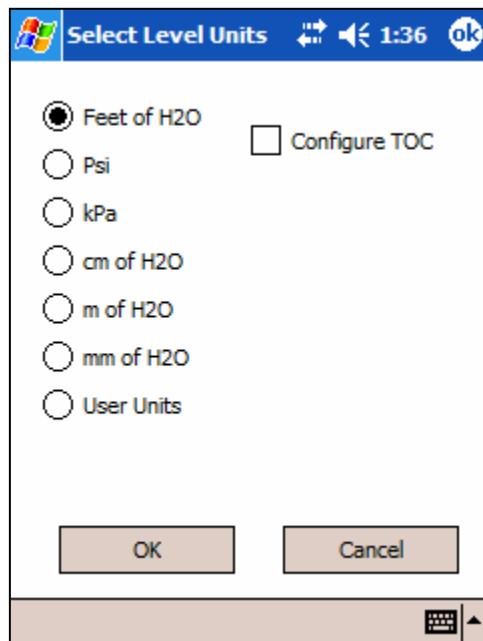
Figure 3.8

Transducers may be configured to output data in any units that are required for the intended application. Some of the more common units of measurement have been incorporated in this program and in the transducer itself as configuration options. Occasionally, an installation will require units of measurement other than those included by default, so provisions are included to allow entry of custom conversion factors (figure 3.9).
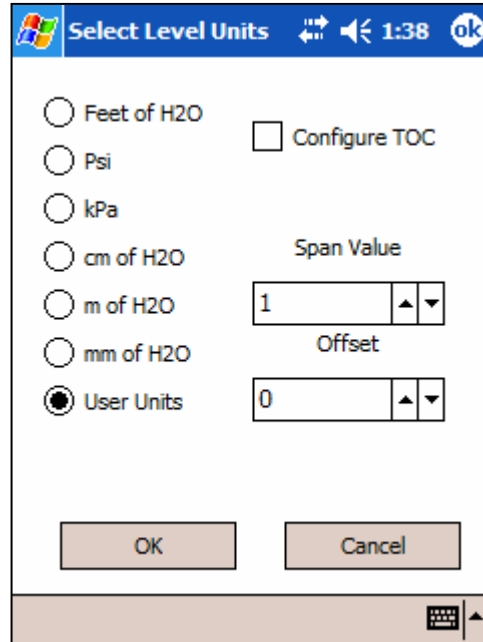

Figure 3.9

Some ground water installations record the distance from ground surface or some other reference point to the surface of the water. This is commonly called a TOC or Top of Casing measurement because the reference point for the measurement is typically at the top of the well casing. The transducer may be easily configured for a TOC measurement by checking the Configure TOC check box (figure3.10). The span value will be automatically configured based on the units selected via the radio buttons down the left of the page. After accepting this adjustment, the new offset value can be stored using the Set Offset and Re-Zero menu (see section 3.1.3.2). Click on the Set Offset and Re-Zero button, then select the "is submerged" option. Measure the distance from the top of casing or reference point to the surface of the water and enter that value in the entry box, and select OK. The transducer will automatically calculate the correct offset value for its installed location.
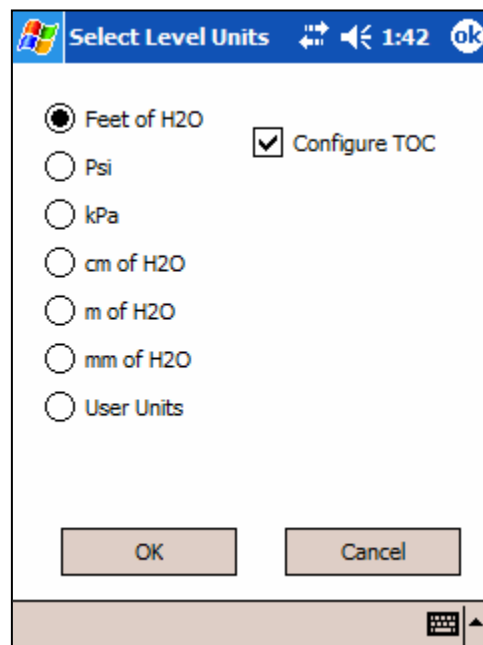

Figure 3.10

3.1.3.4 CHANGE TEMPERATURE UNITS

The Level Scout acquires the temperature of the device as well as the pressure of the medium that it is placed in. The units of measurement for temperature may be changed between Fahrenheit and Celsius through the Change Temperature Units button. By selecting this button a screen will appear allowing the user to change temperature units (figure 3.11). Select **OK** to confirm the change.
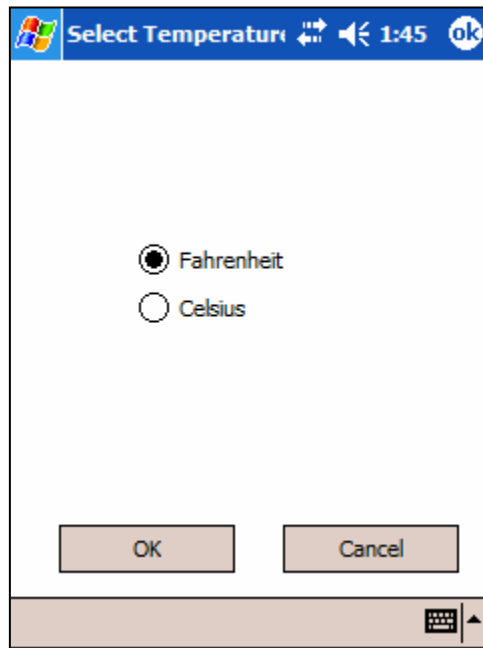

Figure 3.11

3.1.4 OTHER TRANSDUCER PARAMETERS

The following items are located on the Parameters tab and do not directly affect the measurements of the transducer (figure 3.12).
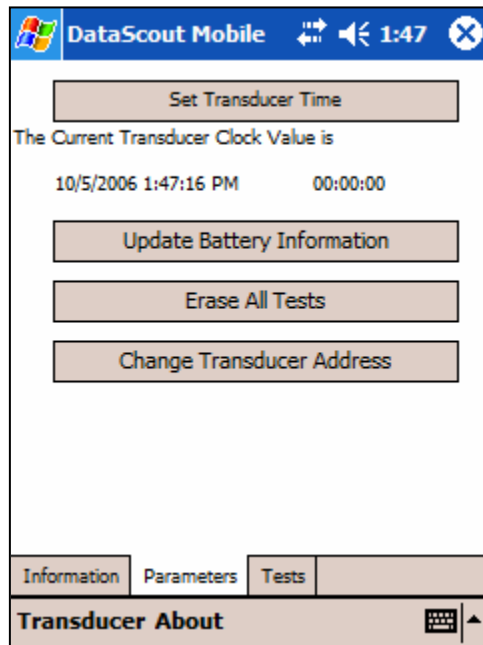

Figure 3.12

3.1.4.1 SET TRANSDUCER DATE AND TIME

The Level Scout is a self contained data logger with an internal clock. That clock must be synchronized to the desired time standard so that recorded data can be accurately time stamped. The transducer internal clock may be adjusted to an absolute date and time or may be set to the time in the device that is running Data Scout Mobile. The display below the **Set Transducer Time** button shows the current transducer date and time on the left and the differential between the handheld PC clock and the transducer in Hours:Minutes:Seconds to the right (figure 3.12). Clicking on the button opens the **Set Clock** page (figure 3.13). Use the down arrow or keyboard to adjust the Level Scout's data and time or check the box next to **Sync with Windows Mobile** to adjust the date and time to match the device running Data Scout Mobile. Click **OK** to confirm the update.
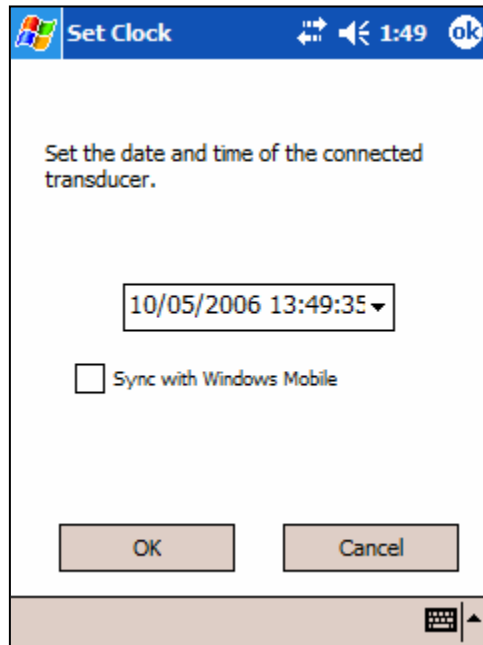

Figure 3.13

3.1.4.2 UPDATE BATTERY INFORMATION

The Level Scout contains two AA alkaline batteries for power. When these batteries are changed, the transducer internal battery condition must be reset so that the percentage of battery charge is accurately reported. This parameter should only be modified if the transducer's batteries have been replaced. Two types of battery may be selected as having been installed. YSI recommends *only* using AA **alkaline** batteries in the Level Scout. If the incorrect battery type is selected the available power indicator will be inaccurate.
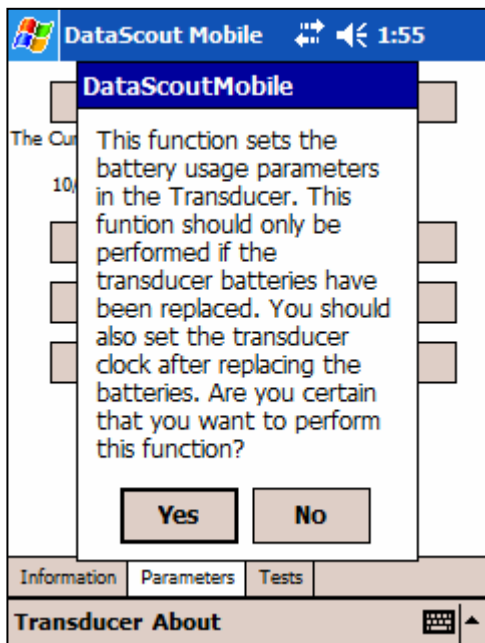

Figure 3.14

Figure 3.15

3.1.4.3   ERASE ALL TESTS

The Level Scout can store data from up to 16 discrete test configurations. Depending on configuration, that data can total three years of measurements contained within the embedded storage medium. Once that space has been filled it must be cleared prior to recording any new measurements or creating additional test configurations. This function will clear all test configurations and their associated stored data regardless of test state or status. If there is any relevant data stored within the transducer you should extract it prior to performing a memory erasure. Erasure is permanent and irrevocable once it has been authorized.
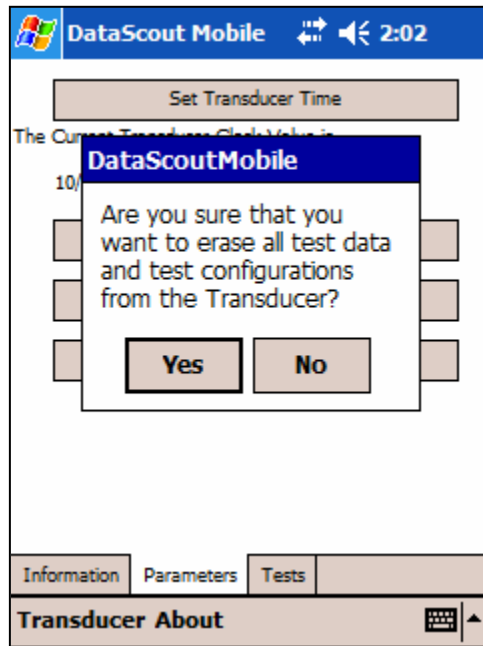
Figure 3.16

3.1.4.4 CHANGE TRANSDUCER ADDRESS

The Level Scout transducers are addressable, there may be more than one device attached to a single cable if unique device addresses are maintained. This requirement is especially important when multiple transducers are to be attached to an SDI-12 data logger. Addresses are single characters within the range of 0-9, a-z, and A-Z. This function modifies a transducers address. Data Scout Mobile will automatically change its configuration to maintain connectivity. If a record of the previous or current address is required it should be noted prior to execution of this function.

Figure 3.17

3.1.5 TEST CONFIGURATIONS

Up to 16 unique, sequentially scheduled test configurations can be retained within a Level Scout. Test configurations are numbered from 1 to 16 and may also be labeled for convenience. Each confi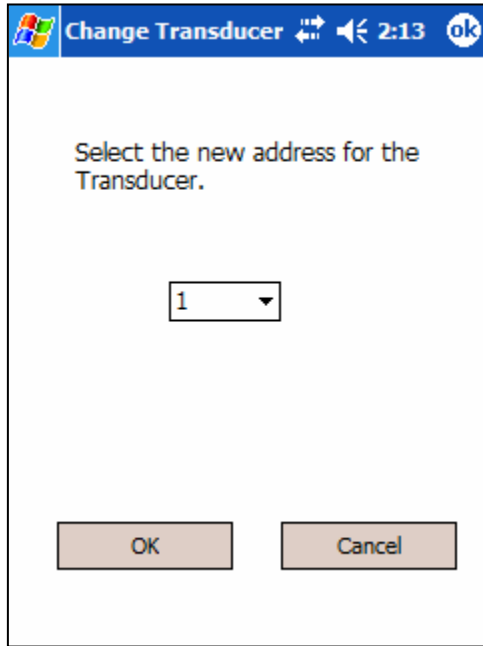guration defines: a test start date and time, a test end date and time, a sample interval, a selection of measurements to record at each of the test intervals, and an optional modifier to the sample interval.

When the **Tests** tab is selected, the current state of every configured test is read from the transducer (figure 3.18). This operation may take up to 1 minute and progress will be indicated by an incrementing bar display. The configuration of test number 1 will always be displayed after the read process has completed (figure 3.19). Other test configurations may be reviewed by incrementing the test **Number** control in the upper right corner of the screen. This number and the optional **Test Name** will identify the test being modified or reviewed. From this page it is possible to modify and create test configurations for the attached transducer.
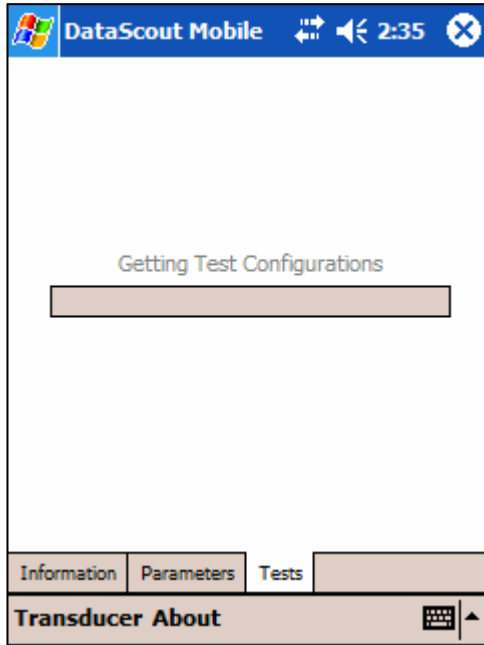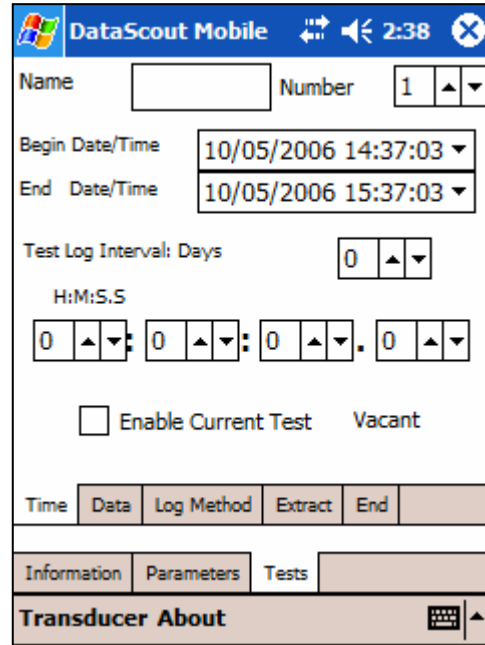

Figure 3.18

Figure 3.19

3.1.5.1 TIME TAB

The controls on this tab display the current tests, Start Date and Time, End Date and Time, Data Acquisition Interval, and Operational Status (figure 3.19). Test status is indicated in the lower right corner of the time tab. Tests can be in one of four possible conditions in Data Scout Mobile: Vacant (not configured or empty), Pending (waiting for the initial start time to elapse), Active (in the process of acquiring data), or Done (the end time has elapsed). If the test is Vacant or Pending then an Enable Test check box will be visible to the left of the status indication. A Pending test may be modified by changing the condition of the Enable Test check box. Once a test has become Active its configuration may not be modified although its execution can be ended altogether.

3.1.5.1.1 MODIFYING THE START AND END DATE/TIME

The start and end date and times may be easily modified by clicking on the Date/Time field symbol. This action will raise the calendar, as illustrated for a point and click selection of the date (figure 3.20). Clicking in the time fields allows direct entry of the desired value for hours:minutes:seconds.tenths of seconds (figure 3.21). This is a 24 hour time entry box so no AM or PM indication will be evident.
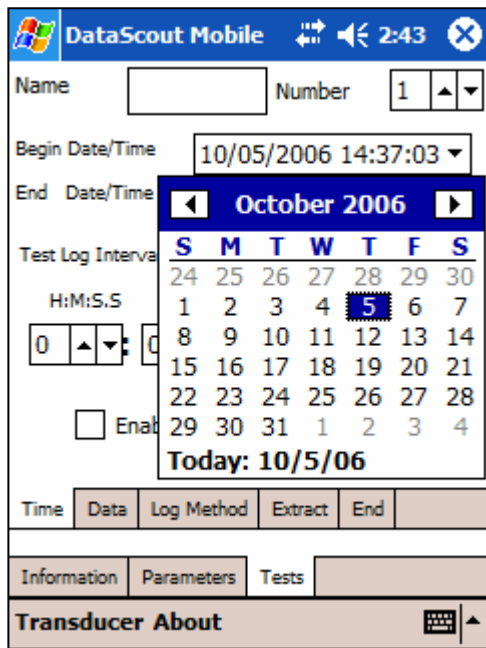
Figure 3.20
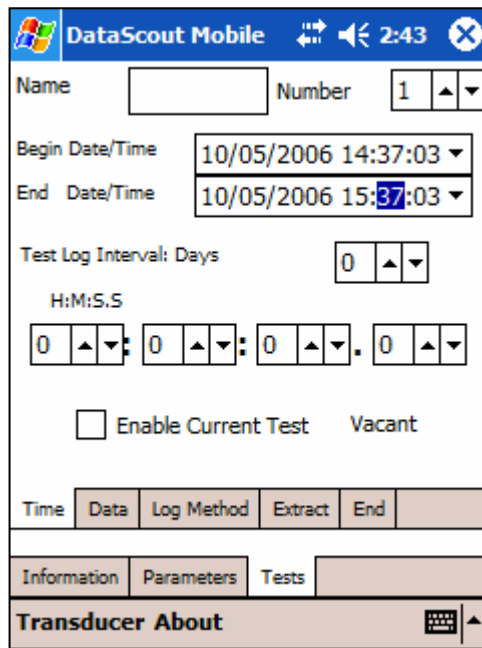
Figure 3.21

3.1.5.1.2 MODIFYING THE TEST LOG INTERVAL

The Test Log Interval is the period of time between discrete measurements over the test period. Measurements may be taken at regular intervals provided that the interval desired is less than the total period of time between the start and end times of the test. For example; if a test were configured to start on January 1st at 0:0:0 and end on January 15th at 0:0:0 then the longest permitted interval between measurements would be 14 days:23 hours:59 minutes: and 59.9 seconds. This interval would produce a test data file containing two measurements, one at the start date and time and one just 0.1 seconds prior to the end date and time. The values for this parameter may be changes using the keyboard or via the $\Delta\nabla$ control next to each entry field. Figure 3.22 shows a 15 minute interval being defined for test 2.

Figure 3.22

3.1.5.2 LOG METHOD TAB

There are four possible log methods available which are simply modifications to the basic log interval. The Log method is selected with a drop menu (figure 3.23).
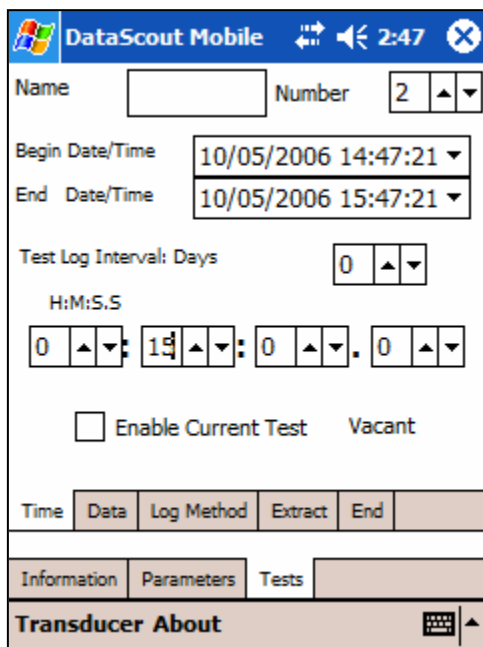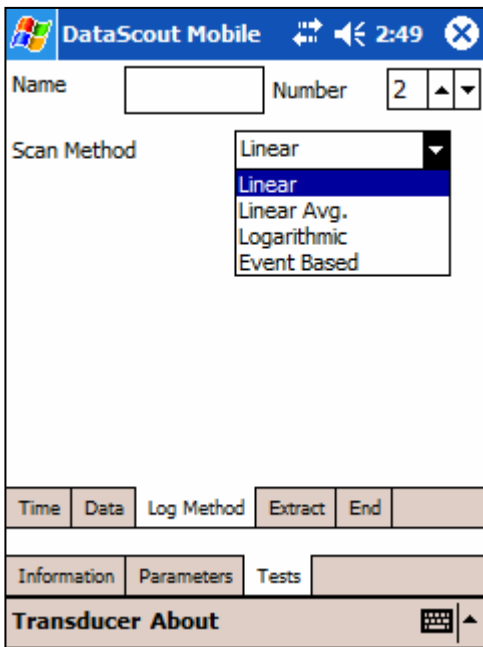

Figure 3.23
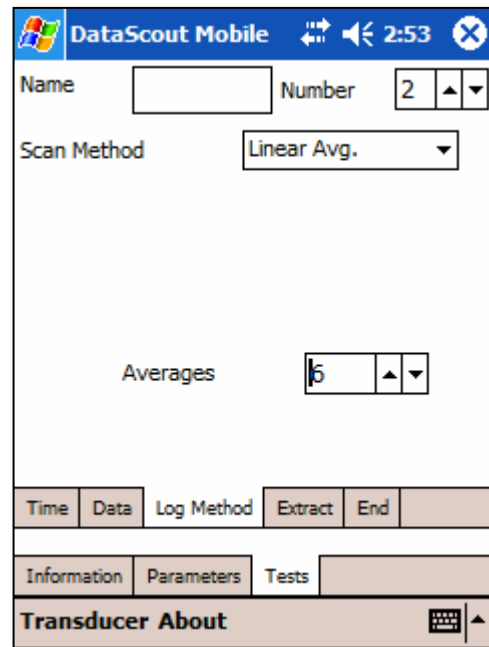
Figure 3.24

3.1.5.2.1 LINEAR

This results in a linear sampling at the basic interval for the entire test duration.

3.1.5.2.2 LINEAR AVERAGED

This method averages N data points into one logged measurement. For example; a test which had a log interval of 10 minutes would acquire 6 measurements per hour. If the Log Method was Linear Averaged and the Averages were set to 6 then one measurement would be stored in the test record every hour. Each of those stored measurements would be the average of 6 discrete measurements spaced at 10 minute intervals over a one hour period (figure 3.24).

3.1.5.2.3 LOGARITHMIC

This method begins recording data at the shortest interval possible, increasing the interval after each measurement on a logarithmic curve until the interval equals the log interval defined on the Time tab. The Time tab interval is maintained until the test ends.

3.1.5.2.4 EVENT BASED

This method takes a measurement at the interval defined on the Time tab. The measurement is logged every N measurements as defined by the Force Log Level. If the difference between the previous measurement and the current measurement is greater than the threshold value the current value is logged, even if the Force Log Level has not been reached.
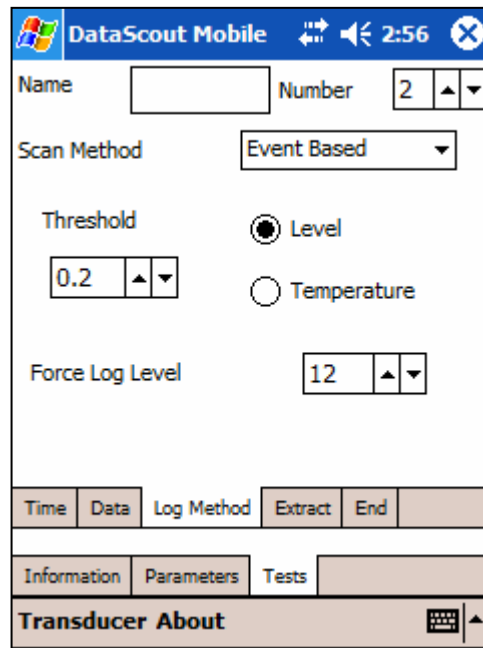
Figure 3.25

For example; a test is configured to log data for 3 months with a base interval of 5 minutes or 12 times an hour. The goal is to log data once an hour if the water level rises less than 0.2 feet of water every 5 minutes. The Threshold is set to 0.2, the transducer is set to log data in feet of water, the Force Log Level is set to 12, and the Log Interval is set to 5 minutes.

3.1.5.3 DATA TAB

The Data Tab allows selection of the values to be logged. The available parameters are; Level (the current level measurement in the configured units), Sensor Temperature (the temperature of the level sensor itself, and Voltage (the current battery voltage). AS4, AT4, VS4, and VT4 Level Scouts incorporate one additional measurement, a high precision temperature sensor located on the circuit board. If the attached transducer is identified is one of these models, an additional check box will become available to enable logging of this parameter.
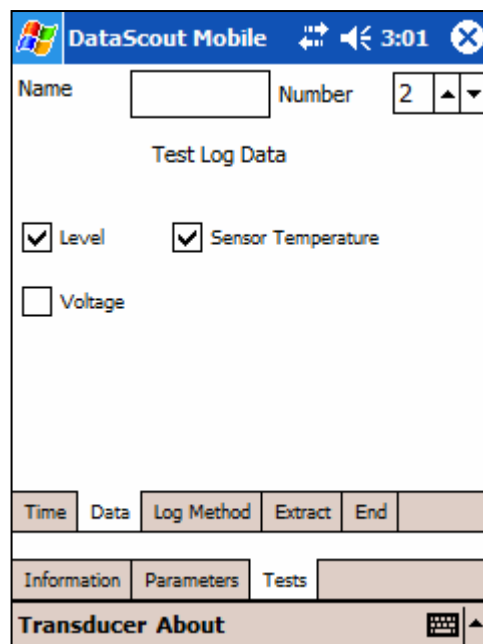
Figure 3.26

3.1.5.4 EXTRACT TAB

The Extract Tab displays all of the data files stored on the transducer that are available for extraction to the device. Files will be stored in a format readable by PocketWord™ and PocketExcel™. The logged data from the currently executing test may also be extracted without ending that test. If a test is Active a check box will be visible to enable the extraction.
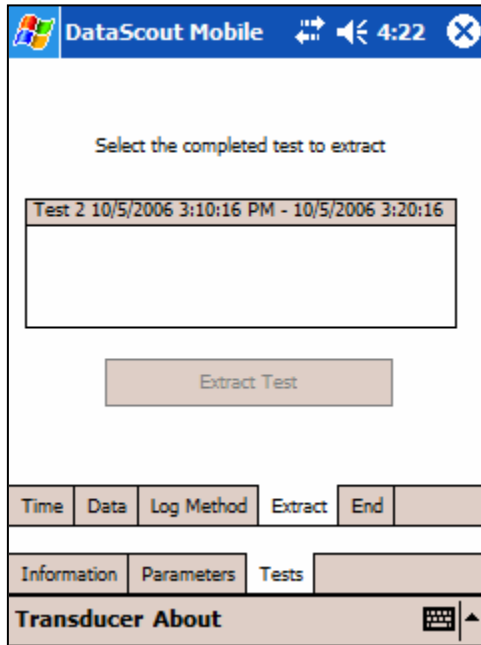
Figure 3.27

3.1.5.5 END TAB

The End Tab has one button on it that ends the currently active test (figure 3.28).
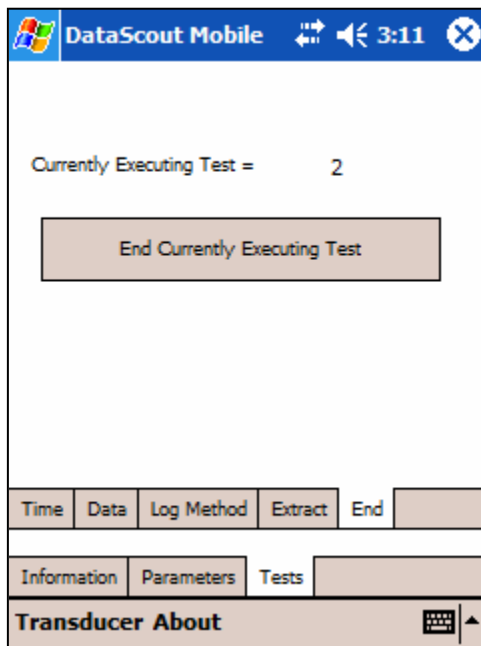
Figure 3.28

4.0 SUPPORT INFORMATION

4.1 WARRANTY

The YSI Level Scout Instrument is warranted for two (2) years from date of purchase by the end user against defects in materials and workmanship, exclusive of batteries and any damaged caused by defective batteries. YSI Level Scout cables and suspension wires are warranted for two (2) years from date of purchase by the end user against defects in material and workmanship. YSI Level Scout systems (instrument & cable/wire) are warranted for 1 year from date of purchase by the end user against defects in material and workmanship when purchased by rental agencies for rental purposes. Within the warranty period, YSI will repair or replace, at its sole discretion, free of charge, any product that YSI determines to be covered by this warranty.

To exercise this warranty, write or call your local YSI representative, or contact YSI Customer Service in Yellow Springs, Ohio at +1 937-767-7241(800-897-4151 US). Send the product and proof of purchase, transportation prepaid, to the Authorized Service Center selected by YSI. Repair or replacement will be made and the product returned, transportation prepaid. Repaired or replaced products are warranted for the balance of the original warranty period, or at least 90 days from date of repair or replacement.

LIMITATION OF WARRANTY

This Warranty does not apply to any YSI product damage or failure caused by:

1)   failure to install, operate or use the product in accordance with YSI's written instructions;

2)   abuse or misuse of the product;

3)   failure to maintain the product in accordance with YSI's written instructions or standard industry procedure;

4)   any improper repairs to the product;

5)   use by you of defective or improper components or parts in servicing or repairing the product;

6)   modification of the product in any way not expressly authorized by YSI.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. YSI'S LIABILITY UNDER THIS WARRANTY IS LIMITED TO REPAIR OR REPLACEMENT OF THE PRODUCT, AND THIS SHALL BE YOUR SOLE AND EXCLUSIVE REMEDY FOR ANY DEFECTIVE PRODUCT COVERED BY THIS WARRANTY. IN NO EVENT SHALL YSI BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY DEFECTIVE PRODUCT COVERED BY THIS WARRANTY.

4.2 ACCESSORIES

Model 770	Communication Cable, non submersible
Model 771	RS-485 to RS-232 converter
Model 772	RS-485 to SDI-12 converter
Model 773	RS-232 to USB converter
Model 780	Desiccant
Model 781	Cable Hanger
Model 782	2" vented locking well cap with dock
Model 783	2" vented locking well cap ONLY
Model 784	2" dock ONLY
Model 785	4" vented locking well cap with dock
Model 786	4" vented locking well cap ONLY
Model 787	4" dock ONLY
BS2	BaroScout, stainless steel, 2 MB memory
BS4	BaroScout, Stainless Steel, 4 MB memory
710-X	Universal cable, Stainless Steel, X ft in length
730-X	Universal cable, Titanium, X ft in length
750-X	Suspension wire, Stainless Steel, X ft in length
760-X	Suspension wire, Titanium, X ft in length
750-0	Stainless Steel Backshell deployment cap
760-0	Titanium Backshell, deployment cap

4.3 SPECIFICATIONS

Level	Range: (Vented)	0 - 10 ft, 3.05 m, 4.3352 PSI 0 - 50 ft, 15.24 m, 21.676 PSI 0 - 75 ft, 22.86 m, 32.5140 PSI 0 - 250 ft, 76.2 m, 108.38 PSI 0 - 692 ft, 210.6 m, 299.9956 PSI
	Range: (Absolute)	0-10 ft. 3.05 m, 19.035 PSI 0-50 ft, 15.24 m, 36.376 PSI 0-70 ft, 21.33 m, 45.046 PSI 0-230 ft, 70.1 m, 114.410 PSI 0-692 ft, 210.9 m, 314.696 PSI
	Accuracy:	0.05 % FS TEB* for ranges > 10 ft ± 0.10 % FS TEB* for ranges <= 10 ft
	Resolution:	0.00001 (Data Scout and Data Scout Mobile) 0.000001 (Data Scout Advanced, user selectable)
	Units:	psi, ft H_2O, mm H_2O, cm H_2O, m H_2O, kPA
Temperature	Range:	-20 to 50° C (Operating Range) -10 to 40° C (Compensating Range)
	Accuracy:	± 1.0° C (for S2, T2, AS2, AT2 models) ± 0.2° C (for S4, T4, AS4, AT4 models)
	Resolution:	0.001 (Data Scout and Data Scout Mobile) 0.01 (Data Scout Advanced)
BaroScout	Range:	8-16 psia, 55-110 kPa
Modes of Sampling		Linear, Linear Average, Event, and Logarithmic
Sampling Rate		Programmable, 15 readings per second max
Memory		2 MB (for S2, T2, AS2, AT2 models) 4 MB (for S4, T4, AS4, AT4 models)
Maximum Pressure Scans (Pressure with Time-Stamp)		196,560 (for S2, T2, AS2, AT2 models) 393,120 (for S4, T4, AS4, AT4 models)
Maximum Pressure and **Temperature Scans** (Pressure and Temp with Time Stamp)		144,144 (for S2, T2, AS2, AT2 models) 288,288 (for S4, T4, AS4, AT4 models)
Time-Stamp Accuracy		±2 min/year (over the compensated temp range)
Proof Pressure		1.5 x FS
Burst Pressure		2.0 x FS
Data Upload Time		100 scans/sec
Storage Temperature		-40 to 80° C without batteries, -20 to 50° C with batteries
Wetted Material		316 SS or Titanium; Viton®
Protection Rating		IP 69, NEMA 6P

Internal Batteries	(2) 1.5 volt AA Alkaline Recommended
Battery Life	3 years @ 15 minute sample intervals
External Excitation	6 – 16 VDC
External Input Current	8.0 mA (average current during measurement) 25.0 mA (15 mS peak current during page writes) 0.25 mA (sleep current)
Communication Interface	RS-485 (3 volt p-p differential with selectable baud rates from 1200 to 19200)
Protocol	SDI-12 ver 1.3 compliant
Weight	0.70 lbs, (318 grams) with batteries 0.15 lbs, (57 grams) cable assembly without cable 0.05 lbs/ft, (79 grams/m) cable 0.005 lbs/ft, (8 grams/m) suspension wire
Diameter	0.75 inches (12.0 mm)
Length	12.44 inches (316.0 mm) from tip to end cap
Cable	Polyurethane jacketed, molded polyurethane seal 200 lbs, 90 kg pull strength conductors, Conductor size – 22 AWG

* TEB – Total Error Band includes the combined errors due to nonlinearity, hysteresis, nonrepeatability, and thermal effects over the compensated temperature range per ISA S51.1

4.4 CONTACT INFORMATION

For ordering and technical support, please contact one of the following offices:

YSI Incorporated, World Headquarters
1700/1725 Brannum Lane
Yellow Springs, Ohio 45387
USA
Phone: +1-937-767-7241
US 800-765-4974
Fax: +1-937-767-9353
Email: environmental@ysi.com

Endeco/YSI
13 Atlantis Drive
Marion, MA 02738
USA
Tel: +1 508 748-0366
Fax: +1 508 748-2543
Email: systems@ysi.com

YSI Hydrodata Ltd
Unit 8, Business Centre West
Avenue One, Letchworth
Herts, SG6 2HB
United Kingdom
Phone: +44-1462-673581
Fax: +44-1462-673582
Email: europe@ysi.com
www.ysihydrodata.com

YSI Middle East
Office #201, PO Box 31218
Road 383, Block 306
Kingdom of Bahrain
Phone: +973-1753-6222
Fax: +973-1753-6333
Email: halsalem@ysi.com

YSI (Qingdao) Limited
Room 301, Cell 2, Block 7
51 Donghai West Road
Qingdao, Shangdong
P.R. China
266071
Phone: +86-532-575-3636
Fax: +86-532-571-0101
Email: ysiqd@ysiqd.com.cn
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YSI Gulf Coast
12231 Industriplex Boulevard, Suite A
Baton Rouge, LA 70809
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Phone: +1-225-753-2650
US 866-216-2662
Fax: +1-225-753-8669
Email: environmental@ysi.com

YSI Hydrodata Ltd
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Co. Meath
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Fax: +353-46-948-7637
Email: ireland@ysi.com

YSI Nanotech
Kaizuka 1-15-4
Kawasaki-Ku
Kawasaki City, 210-0014
Japan
Phone: +81-44-222-0009
Fax: +81-44-222-1102
Email: nanotech@ysi.com

YSI (HK) Limited
Room A, 11 [th] Floor
Hoover Industrial Building
26-38 Kwai Cheong Road
New Territories, Hong Kong S.A.R.
Phone: +852-2891-8154
Fax: +852-2834-0034
Email: hongkong@ysi.com

4.5 SERVICE CENTER INFORMATION

YSI has authorized service centers throughout the United States and Internationally. For the nearest service center information, please visit www.ysi.com or contact YSI Technical Support directly at 800-897-4151 (US), +1 937 767-7241, or environmental@ysi.com.

When returning a product for service to a YSI Facility, include the Product Return Form with cleaning certification (see following page). The form must be completely filled out for a YSI Service Center to accept the instrument for service. When returning a product to a YSI authorized service center, please contact the authorized service center directly for information on how to return a product.

Ship to:
YSI Service Center
1725 Brannum Lane
Yellow Springs, OH 45387
+1 937 767 7241
environmental@ysi.com
www.ysi.com

YSI

Product Return Form

If known, please provide your:

YSI Customer # _____

Service Request # _____

Step 1: Provide your billing and shipping information

BILL TO	SHIP TO	RETURN SHIPPING	
		VIA (CIRCLE ONE)	
		DHL FedEx UPS	
		Account #:	
		Please note: Shipping is prepaid and add.	
CONTACT:	CONTACT:	METHOD (CIRCLE ONE)	
PHONE: ( )	PHONE: ( )	Ground	Next Day AM
FAX: ( )	FAX: ( )	2 Day	Next Day PM
EMAIL:	EMAIL:	Other:	

Step 2: Provide information on your equipment

MODEL NUMBER:	SERIAL NUMBER:

PLEASE DESCRIBE THE PROBLEM(S):

Step 3: Provide your method of payment

PAYMENT METHOD
FOR FASTER SERVICE, SEPCIFY 'PRE-APPROVAL' AND PROVIDE THE AMOUNT AND PAYMENT METHOD

☐   Pre-approval with PO or Credit Card # included
Amount: _____
Signature:
          X _____
    ☐   Purchase Order (please attach)
     PO Number:

    ☐   Credit Card (circle one)
         VISA   MasterCard   American Express
     Name on Card:
     Number:
     Expiration Date:
☐   Prepayment
☐   Quote Required

Please note: There is an estimate fee of approximately $35 to $80 (product dependent) which is waived if service is approved.

Step 4: Fill out the Cleaning Certificate

CLEANING CERTIFICATE

Model Number:

Lot/Serial Number:

Contaminants (if known):

Cleaning Agents used:

☐   Radioactive Decontamination Certified
(check only if product has been exposed to radiation and successfully decontaminiated.)

Cleaning Certified by:
Signature:
          X _____
Date:

For more information contact us at 800-897-4151 (US) or visit www.ysi.com.

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