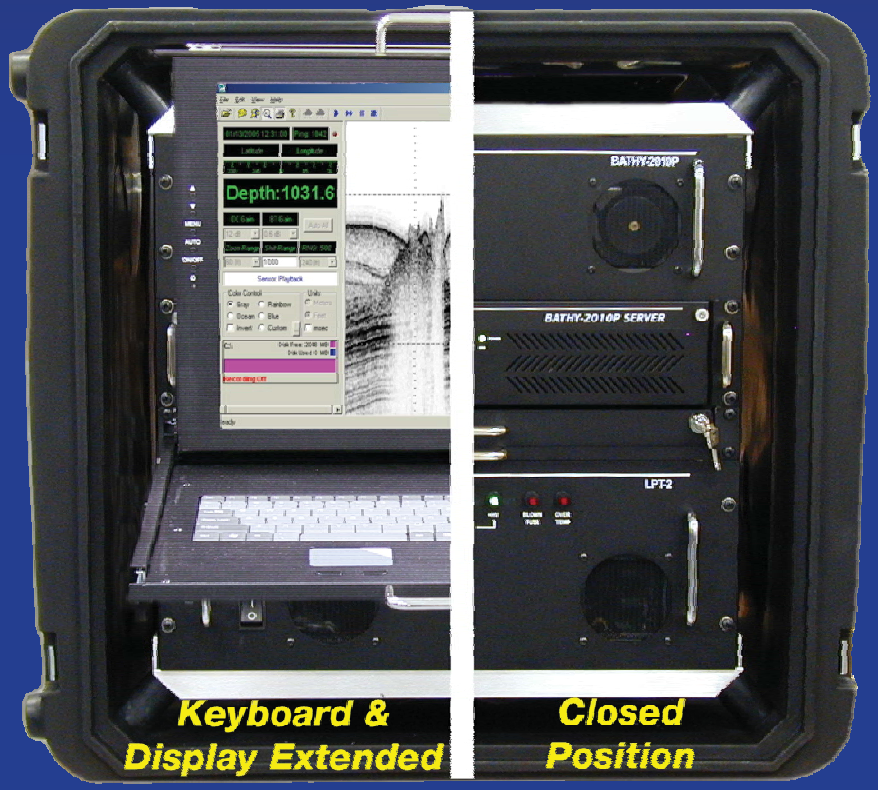
Bathy-2010P ™ CHIRP Subbottom Profiler / Deep Water Echo Sounder

- **Overview**
- **Operation**
- **Installation**
- **Maintenance**
- **Applications**

B2010P Overview - Components



- Bathy-2010P Sonar Unit
- Bathy-2010P Server Unit
- Bathy 2010P LCD Display/Keyboard/Touchpad Drawer Assembly
- LPT-2 2KW Linear Power Transmitter
- Bathy2010P Manual
- Bathy-2010P Installation Software

Bathy 2010P Overview – Safety

- The following are general safety precautions that are not related to any specific procedures and therefore do not appear elsewhere in this publication. These are recommended precautions that personnel must understand and apply during many phases of operation and maintenance.
- **KEEP AWAY FROM LIVE CIRCUITS-** Operating personnel must at all times observe all safety regulations. Do not replace components or make adjustments inside the equipment with the high voltage supply turned on. Under certain conditions, dangerous potentials may exist when the power control is in the off position, due to charges retained by capacitors. To avoid casualties, always remove power and discharge and ground a circuit before touching it.
- **DO NOT SERVICE OR ADJUST-** Under no circumstances should any person reach into to enter the enclosure for the purposes of servicing or adjusting the equipment except in the presence of someone who is capable of rendering aid.
- **RESUSCITATION-** Personnel working with or near high voltages should be familiar with modern methods of resuscitation.

- **WARNING-** 120VAC is present in the Bathy 2010 Unit and Server. Thus, the risk of electrical shock and serious injury is present. All precautions should be taken to insure no human contact is made to the unit while power is on.

- **WARNING-** 240VAC, 120VAC and 300VDC are all present in the LPT Unit. They are only accessible after the safety shield is removed. Thus, the risk of electrical shock and serious injury is present. All precautions should be taken to insure no human contact is made to the unit while power is on.

- **CAUTION-** The Bathy 2010P has many ESD (Electrostatic Sensitive Devices). Normal precautions involve the use of anti-static protection material and ground straps for test personnel.

Bathy 2010P Overview – Safety

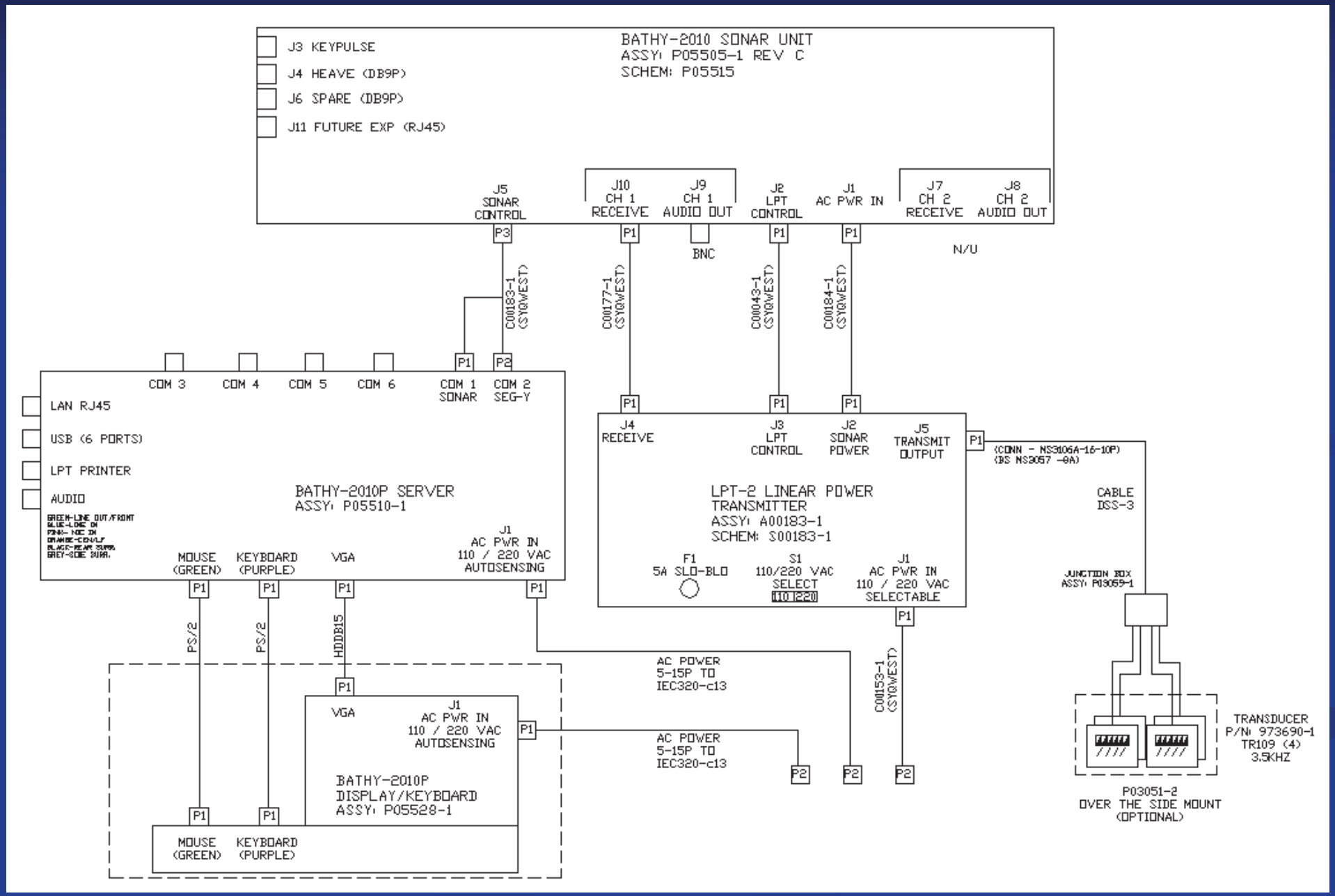
- **Shipping and Handling - The Bathy 2010P units are delivered in a Portable Ruggedized 19” rack mount with front and back protective covers and optional roller base unit.**

Emergency Operation and Shutdown - Under any emergency, adverse, or abnormal ship conditions, the Bathy-2010P system electronics should be powered down. The system is powered down by placing the toggle switch on the front panel of the LPT-2 into the **- OFF** position.

Bathy 2010P Overview – System

- Data Acquisition
- Data Storage
- Data Playback
- Post-Processing / CHIRP Sub Bottom Profiler Software Interface
- Linear Power Transmitter
- Hardcopy Devices
- Transducers (Frequencies/Power)

Bathy 2010P Overview – System Interconnect



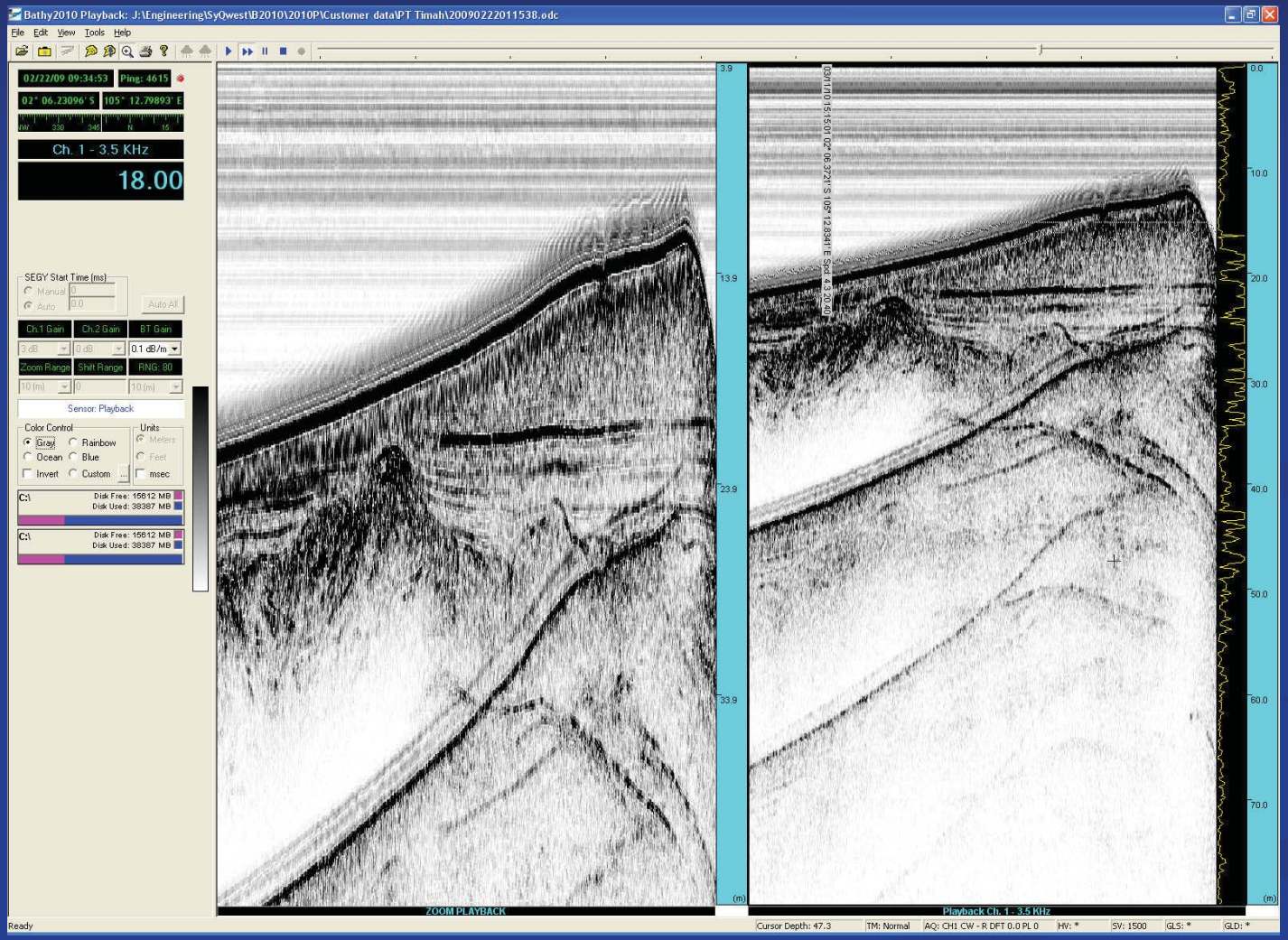
Bathy 2010P Overview – Equipment Specifications

Units	**Feet or Meters**
Depth Ranges	**15, 30, 60, 120, 240, 480, 800, 1500, 2400, 3000,6000, 15000, 30000 Feet** **5, 10, 20, 40, 80, 150, 300, 500, 750, 1000, 2000, 5000, 12000 Meters** **Auto-ranging modes in all units.**
Shift Range	**0-450 Feet in 1 Foot increments** **0-150 Meters in 1 Meter increments**
Zoom Range	**30, 60, 120, 240, 480, 900,1500 Feet** **10, 20, 40, 80, 160, 320, 640 Meters**
Zoom Modes	**Bottom Zoom, Bottom Lock Zoom, Marker Zoom, GUI Zoom (Playback Only)**
Display	**Normal Data, Zoom Data, Navigation, Depth, Command/Status, Color Control for Data: 4 Selections or Custom (User Input), Data Color Invert possible**
Strata Resolution	**Up to 6 cm (for Subbottom applications only)**
Depth Resolution	**0.1 Feet, 0.01 Meters**
Depth Accuracy	**Meets or exceeds all current IHO CHIRP Sub Bottom Profiler requirements for single beam echo sounders with Survey Grade Transducers.**
Speed of Sound	**User Selectable 1500 Meters/Second, 4800 Feet/Second;** **Adjustable in increments of 1 M/sec or 1 FT/sec**
Geographic Position	**NMEA 0183, GLL, GGA, RMC, VTG, VHW, HDT** **Selectable Baud Rates (RS-232): 4800, 9600, 19200, 38400**
Printer Output	**Centronics (Parallel Port) interface to syQwest, Inc.'s TDU Series Thermal Printers, EPC and Isys Thermal Recorders**

Bathy 2010P Overview – Equipment Specifications

Specifications (continued)	
Shallow Water Operation	**< 0.5 Meters; frequency and bottom type dependant**
Transmit Rate	**Up to 4 Hz, depth and operator mode dependant**
Event Marks	**Periodic, External, and/or Manual (Periodic selectable in 1 minute intervals)**
Data File Output	**Stores in industry standard SEGY format. Either Raw data or Processed data may be selected. Stores Depth, Navigation, and Graphic Data in ODC format (Proprietary) Normal and Zoom Data stored is Pixel data and can be played back and/or printed**
Data File Playback	**Files can be played back and/or printed at Normal or Fast-Forward speed, with Pause and GUI Zoom and a Playback Scroll Bar for ease of file playback.**
Frequency Output	**3.5KHz - 350KHz on either Channel**
Transmit Output Power	**2KW (Pulsed) (maximum), multiple Power Level selections**
Input Power	**10-30VDC Nominal Power < 60 Watts (sensor unit). AC Option Available**
Dimensions	**12.5” W(31.75cm) x 14”L (25.5cm) x 4.65”H (11.81cm) Bathy 2010P Sensor Unit 19”(48.26cm) x 16”(40.64cm) x 5.19”(13.2cm) Bathy 2010P 15” LCD Display**
Weight	**11lbs (4.98kg) Bathy 2010P Sensor Unit 16lbs (7.25kg) Bathy 2010P 15” LCD Panel PC/ Display**
Environmental	**0 to 50 degrees C Operating Temperature 0 to 95° non-condensing**

Bathy 2010P Host Software



- Main Window
- Toolbar
- Function Key Controls
- Navigation/Depth Display
- Gain and Auto Controls
- Range, Zoom Range, and Shift Controls
- Data Acquisition / Playback
- Color Palette and Unit Controls
- File Capture Status
- Range Markers
- Mouse Depth/Position Fields

The Toolbar Buttons

Quick access to common Bathy 2010 functions. From left to right they include:

Open A Playback File

Capture Screen

Insert Text Annotation

Insert Manual Event Mark

Toggle Playback Zoom

Toggle TDU Printer On or Off

Get Bathy 2010 Software And Version Info

Starts the Bathy 2010 Data Acquisition / Playback Unit Pinging

Stops the Bathy 2010 Data Acquisition / Playback Unit Pinging

Playback a Previously Recorded File

Toggle Fast Forward/Normal Playback

Pause Playback

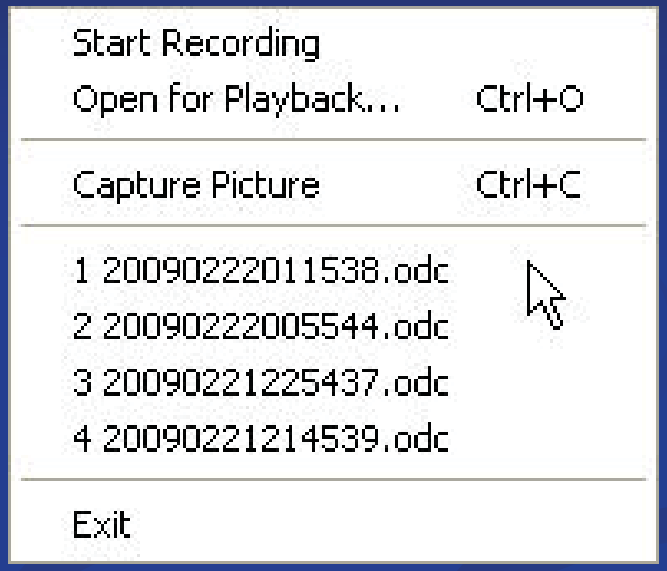
Stop Playback

Playback Slide Bar

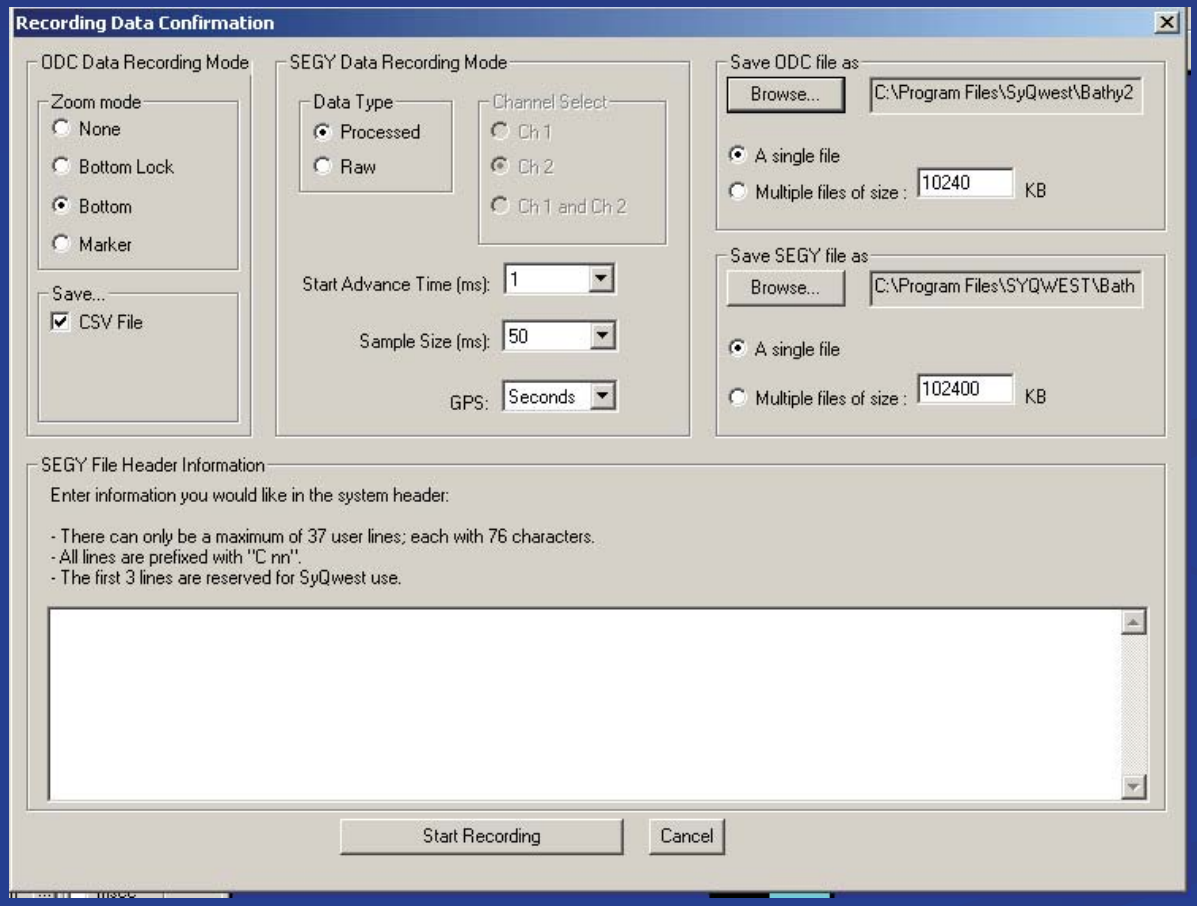
NOTE: Playback buttons are available in Playback mode only and will be disabled otherwise.

Menu Bar

- **File Menu**
  - **Start/Stop Recording**
  - **Open for Playback**
  - **Capture Picture**
  - **Recent Files**
  - **Exit**



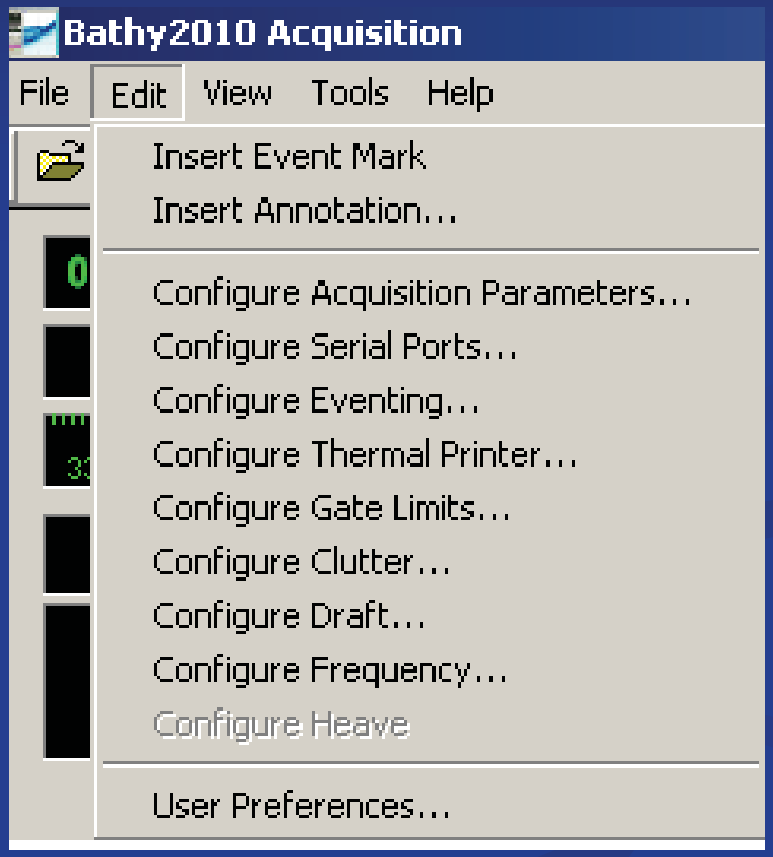
Recording Data Confirmation Window



- ODC Data Recording Mode
- SEG-Y Data Recording Mode
- Save ODC file as path selection
- Save ODC file as path selection
- SEG-Y File Header Information
- Start Recording ODC Data Only

Edit Menu

- Insert Event Mark
- Insert Annotation
- Configure Acquisition Parameters
- Configure Serial Ports
- Configure Eventing
- Configure Thermal Printer
- Configure Gate Limits
- Configure Clutter
- Configure Draft
- Configure Frequency
- Configure Heave



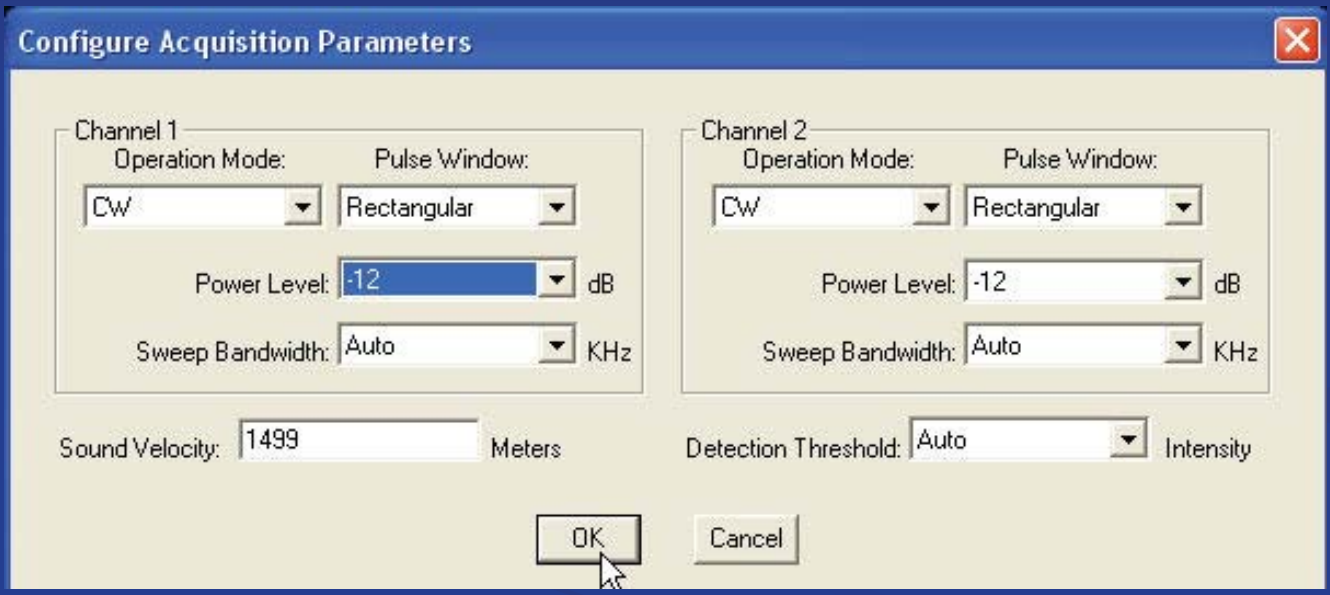
Inserting Annotations / Event Marks

- Annotation Window

- Configure Eventing
- Event Timing
  Manual or Periodic
- Annotate Event Mark With …
  Position, Speed, Depth etc…

Configuring Acquisition Parameters

- Operating Mode
- Transmit Rate
- Pulse Window
- Power Level
- Sweep Bandwidth
- Sound Velocity
- Detection Threshold



Sound Velocity Calculations

- Sound Velocity can be determined by three methods.

1. Sound Velocimeter
2. Bar Check
3. Temperature versus Salinity Table

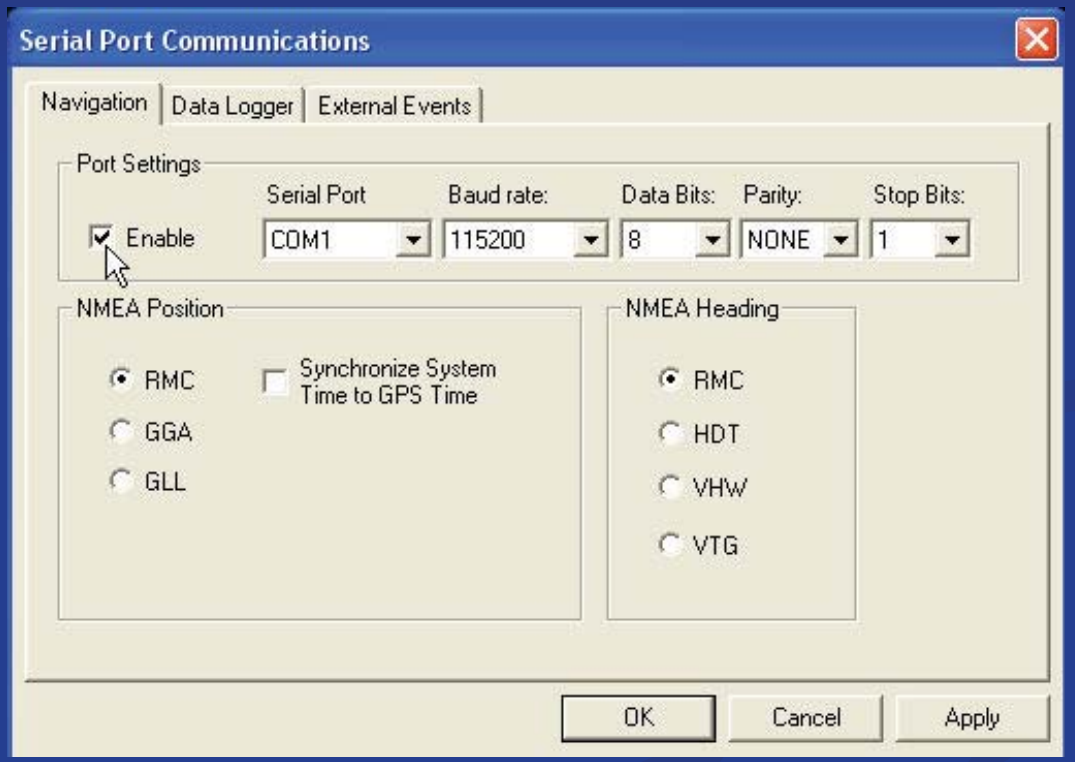
Sound Velocity (Celcius versus part per thousand)

SAL / TEMP	0 ppt.	5 ppt.	10 ppt.	15 ppt.	20 ppt.	25 ppt.	30 ppt.	35 ppt.	40 ppt.
0 deg. C	1400	1407	1414	1421	1481	1435	1442	1449	1445
5 deg. C	1424	1431	1437	1444	1451	1457	1464	1470	1447
10 deg. C	1445	1452	1458	1464	1471	1477	1483	1490	1496
15 deg. C	1464	1470	1476	1482	1488	1495	1501	1507	1513
20 deg. C	1481	1487	1493	1498	1504	1510	1516	1521	1527
25 deg. C	1496	1502	1507	1513	1518	1523	1529	1534	11540
30 deg. C	1510	1515	1520	1525	1530	1535	1540	1546	1551
35 deg. C	1522	1526	1531	1536	1541	1546	1551	1555	1560
40 deg. C	1532	1537	1541	1546	1551	1555	1560	1564	1569

(Sound Velocity values are in meters per second)

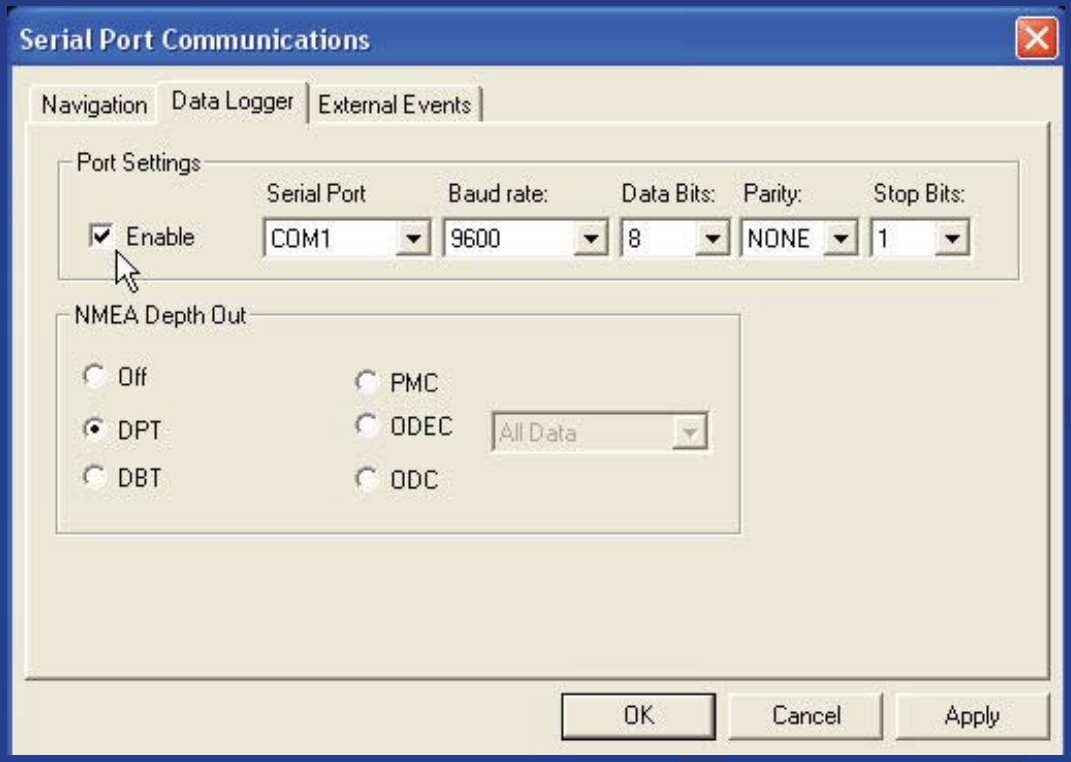
Configure Serial Ports Navigation

- Navigation
- Port Settings
- NMEA position
- NMEA Heading



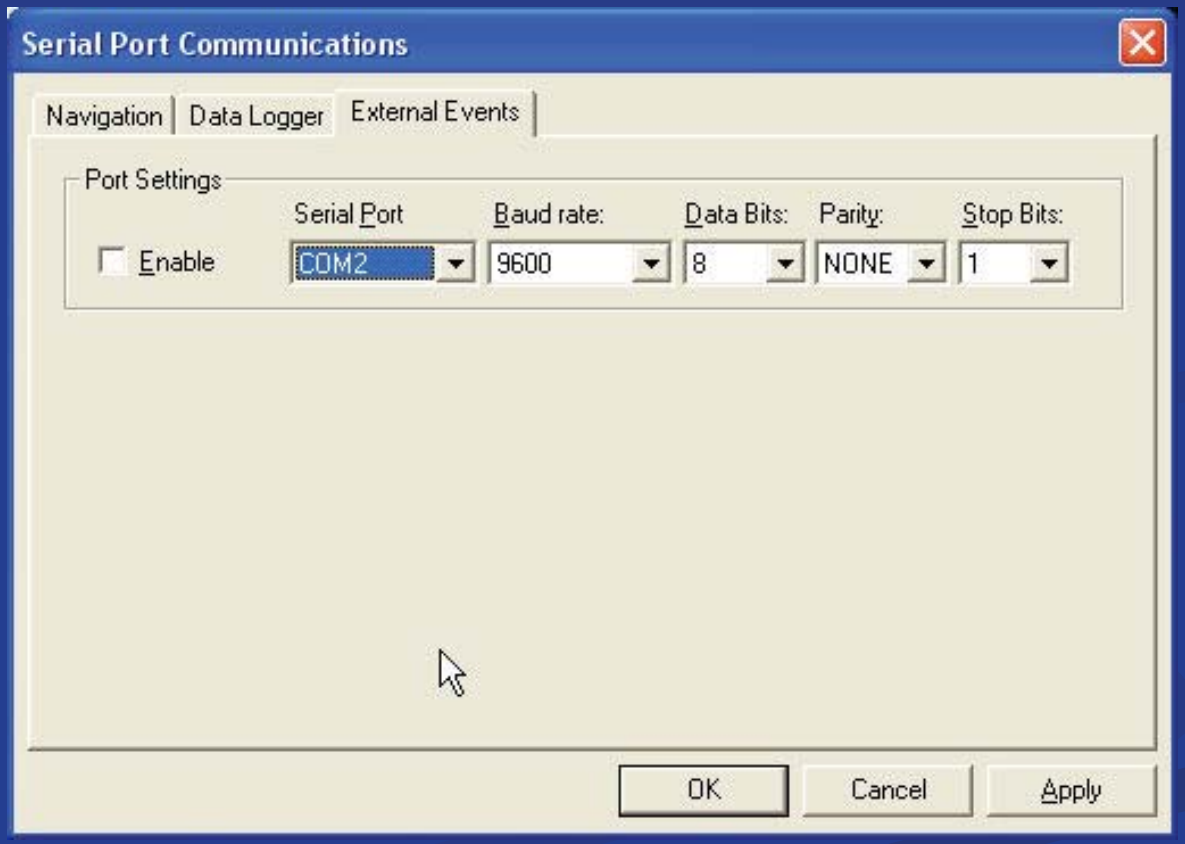
Configure Serial Ports Data Logging

- Port Settings
- NMEA Depth Output
- DPT
- DBT
- PMC
- ODEC (All Data or Depth Only formats)
- ODC



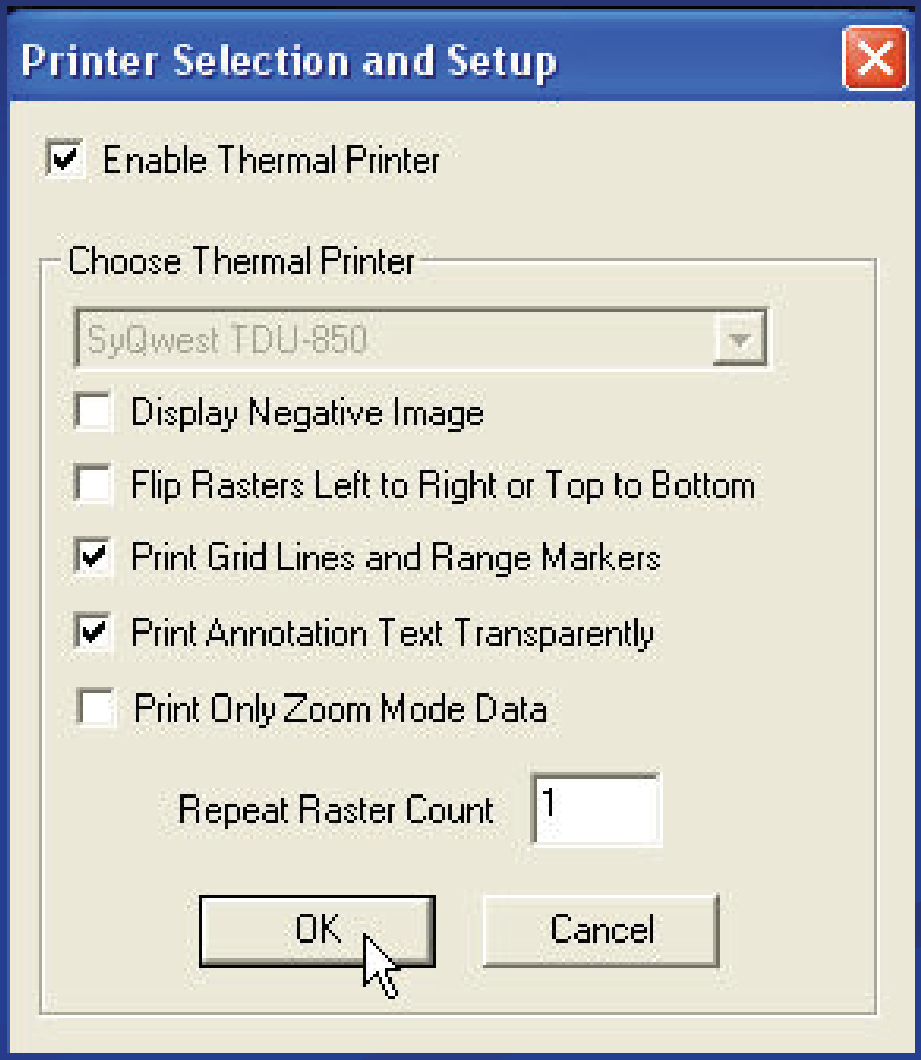
Configure Serial Ports External Eventing

- **Port Settings**



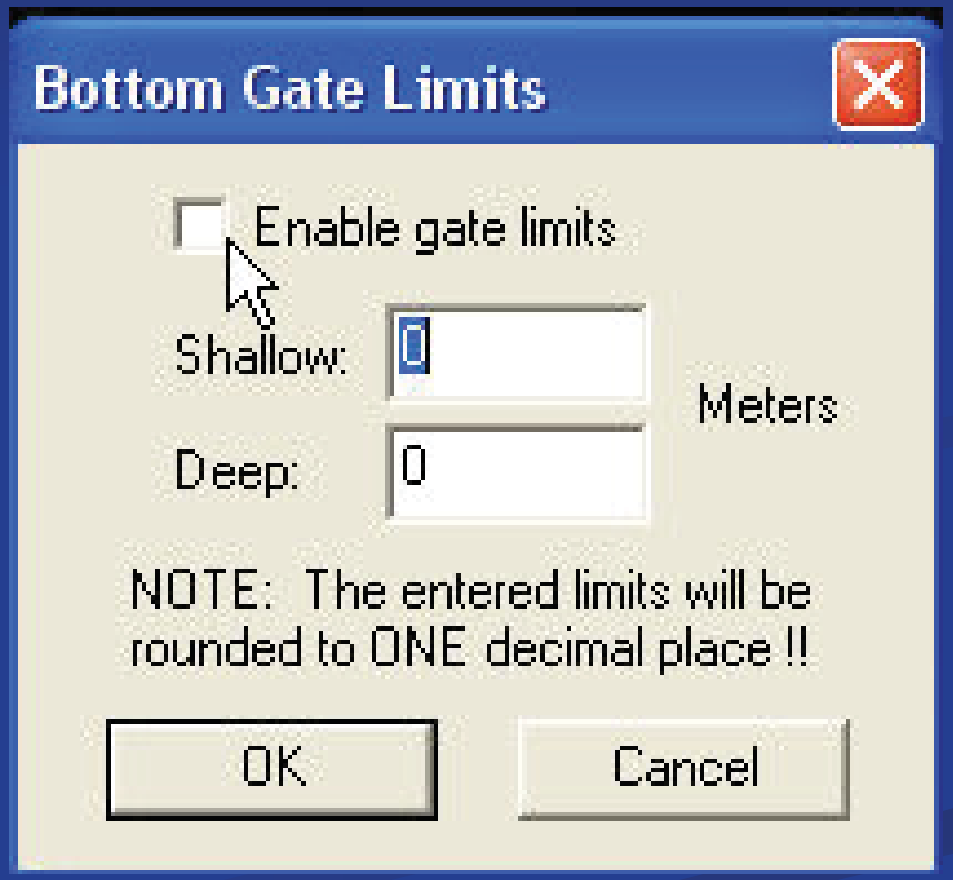
Configure Thermal Printer

- Enable Thermal Printer
- Choose Thermal Printer
- Display Negative Image
- Flip Raster Left/Right or Top/Bottom
- Print Grid/Range Markers
- Print Annotations Transparently
- Print Zoom Data Only
- Repeat Raster Count



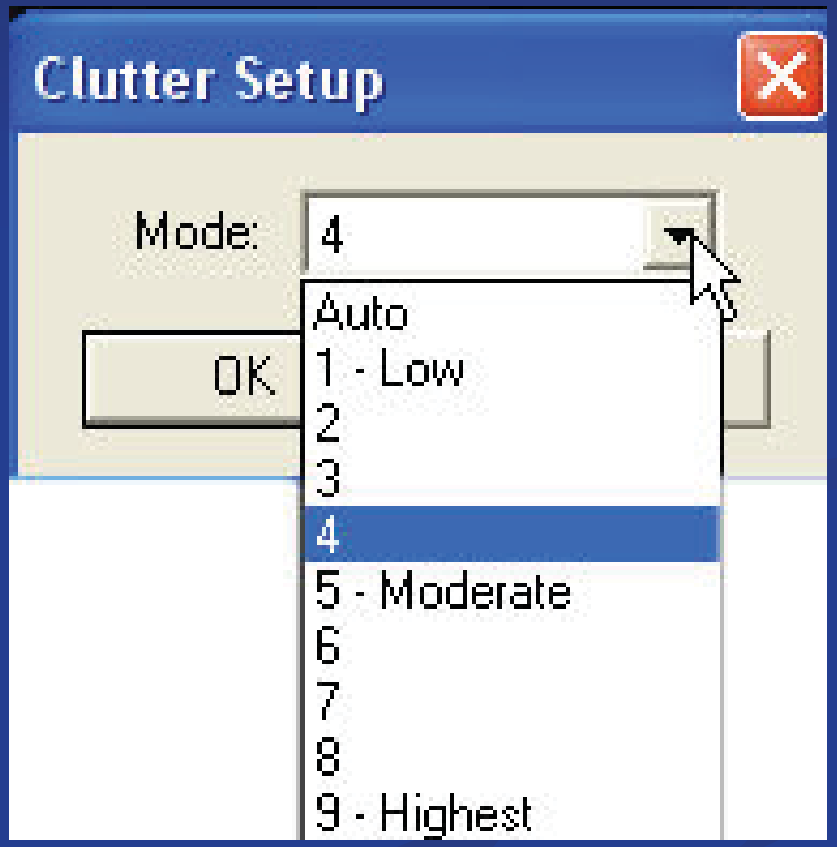
Configure Gate Limits

- Enable Bottom Gate Limits
- Shallow Limit
- Deep Limit
- Entered Limits will be rounded to one decimal place!!



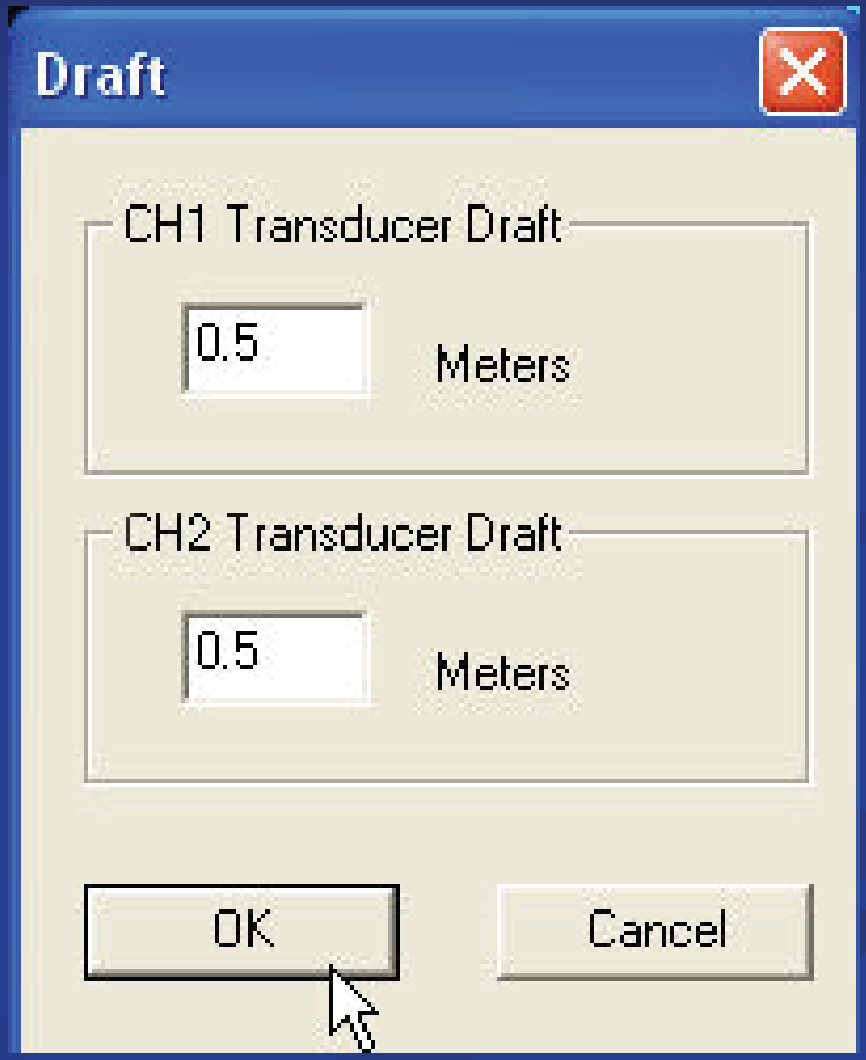
Clutter Setup

- The Clutter Level setting allows the user to dynamically adjust the color palette to eliminate low level noise in areas where the water is contaminated.
- The AUTO setting is good for most applications.
- Manual Clutter settings from 1 to 9 can be selected to the users liking. Level 1 permits the lowest signal levels to be viewed and Level 9 permits only the strong to moderate reply levels to be viewed.
- The optimum values for most applications are in the 4-6 range.



Configure Draft

- Allows the user to compensate all sounding data for transducer location and ship's draft. User entered value.
- The Transducer Draft value is determined by measuring the distance from the waterline to the face of the transducer.
- This measurement provides an offset which can be used to determine the water depth below the surface or the depth below the transducer.

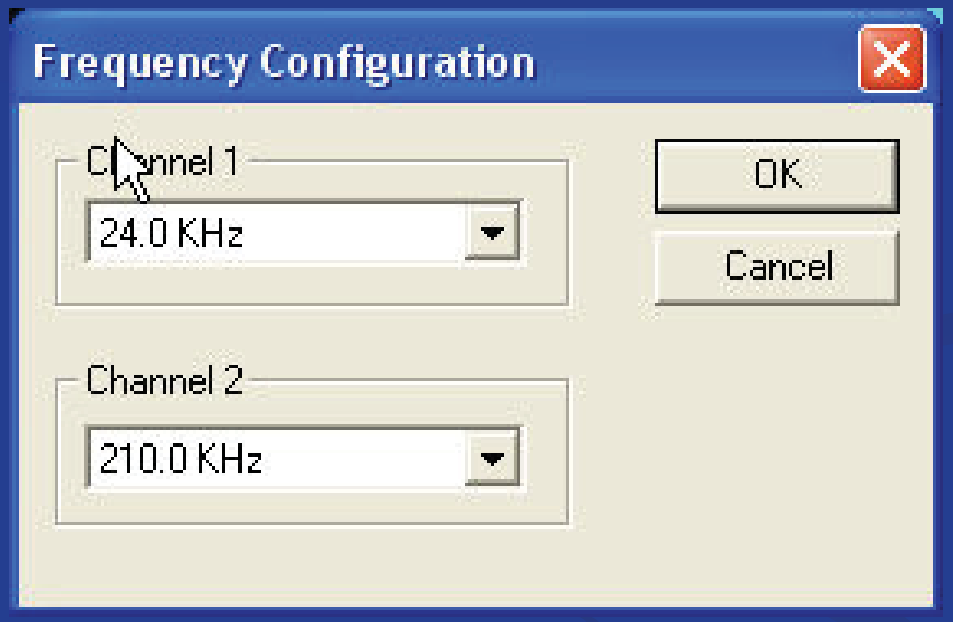


Configure Heave

- For high resolution survey requirements the heave input is used to correct the digitized depth values and the real time sounding data for the vertical motion of the vessel. The instantaneous Heave value is displayed on the system status bar and is stored in the ODC file.

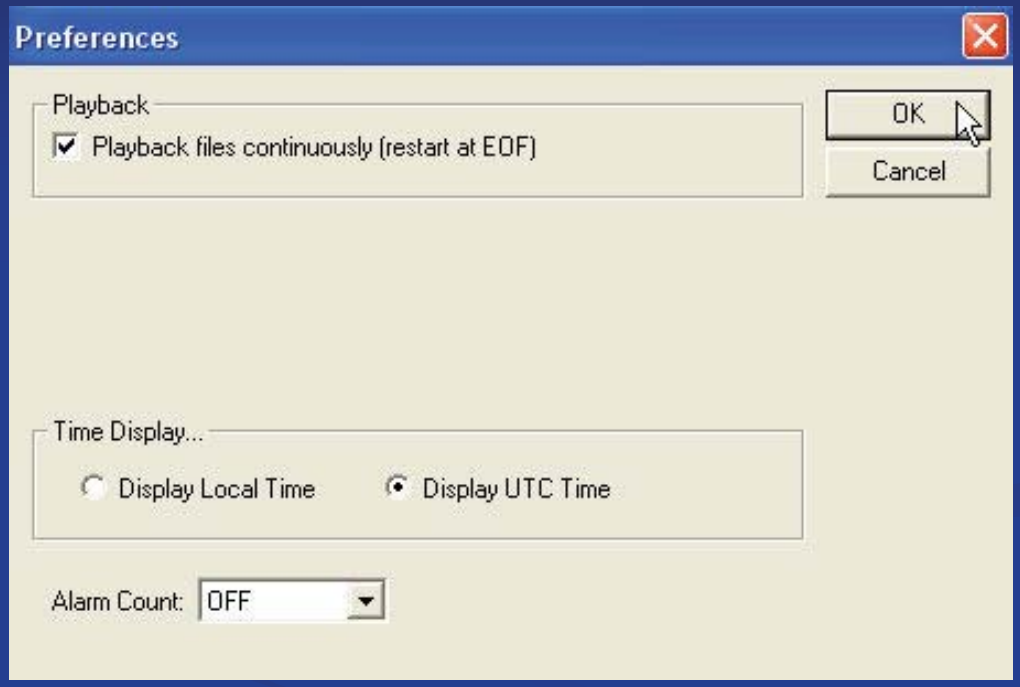
Configure Frequency

- Allows the user to select the frequencies used for each channel of operation.
- Please note that this function is usually factory configured at the time of order.



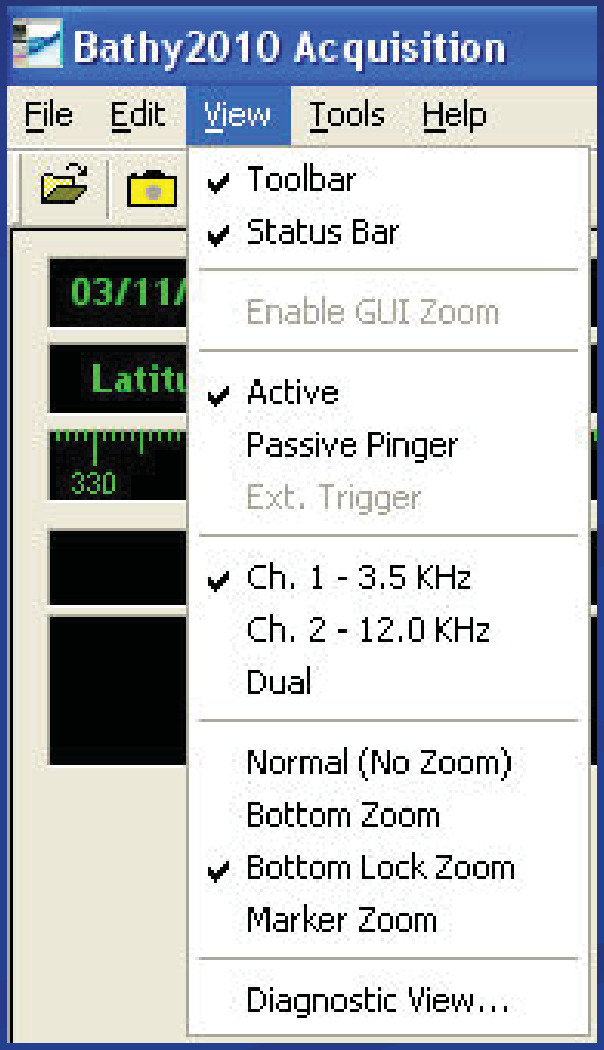
User Preferences

- Playback files continuously (restart at end of file)
- Time Display Selection – User can select Displaying Local or UTC Time.
- Alarm Count which is a threshold on which if the bottom is lost for a user selectable number of pings the Bathy 2010P will then signal; bottom lost.

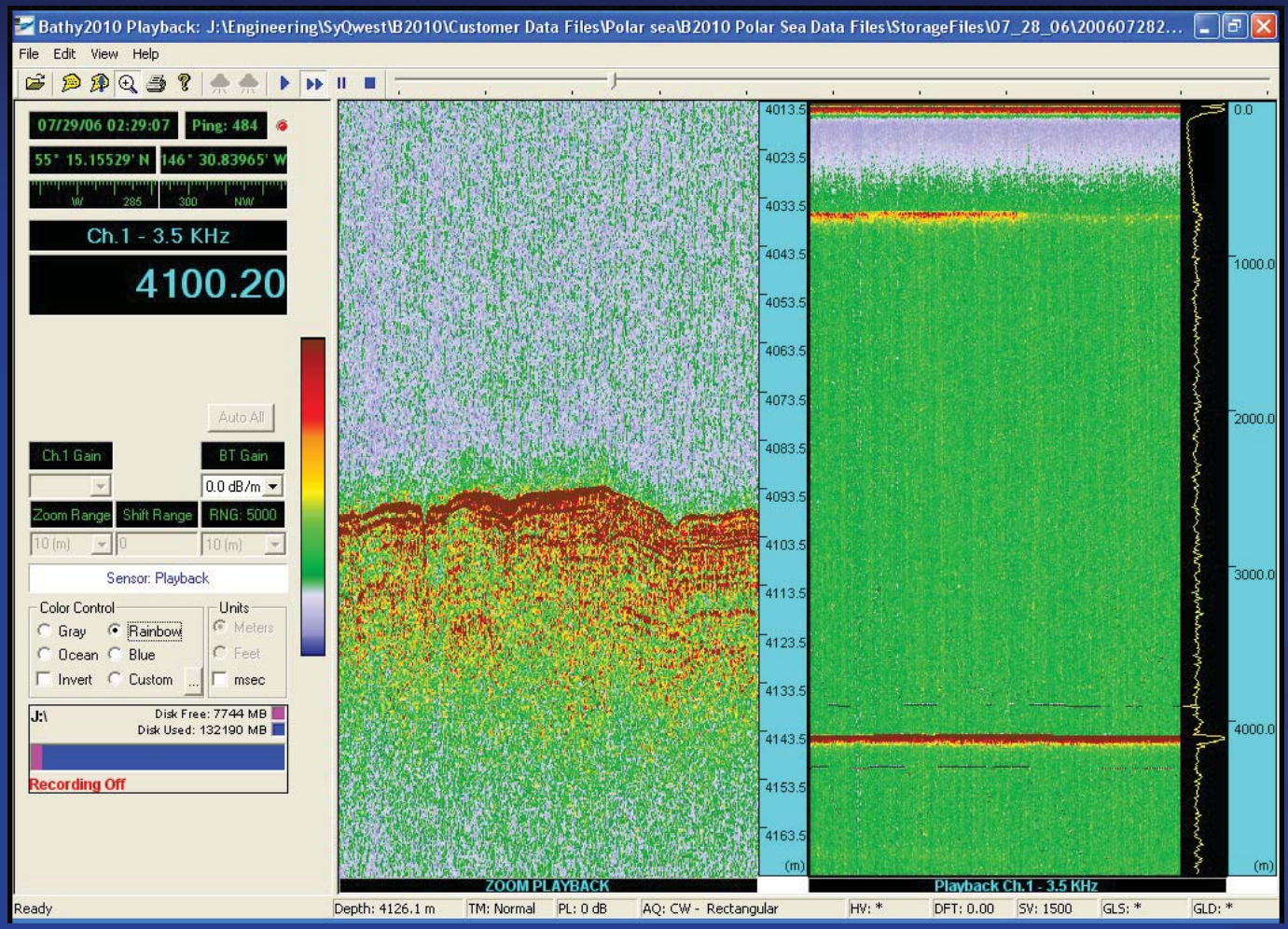


View Menu

- Toolbar
- Status Bar
- Enable GUI Zoom
- Passive Pinger
- CH. 1- Selection
- CH. 2- Selection
- Dual
- Normal (No Zoom)
- Bottom Zoom
- Bottom Lock Zoom
- Marker Zoom
- Diagnostic View…

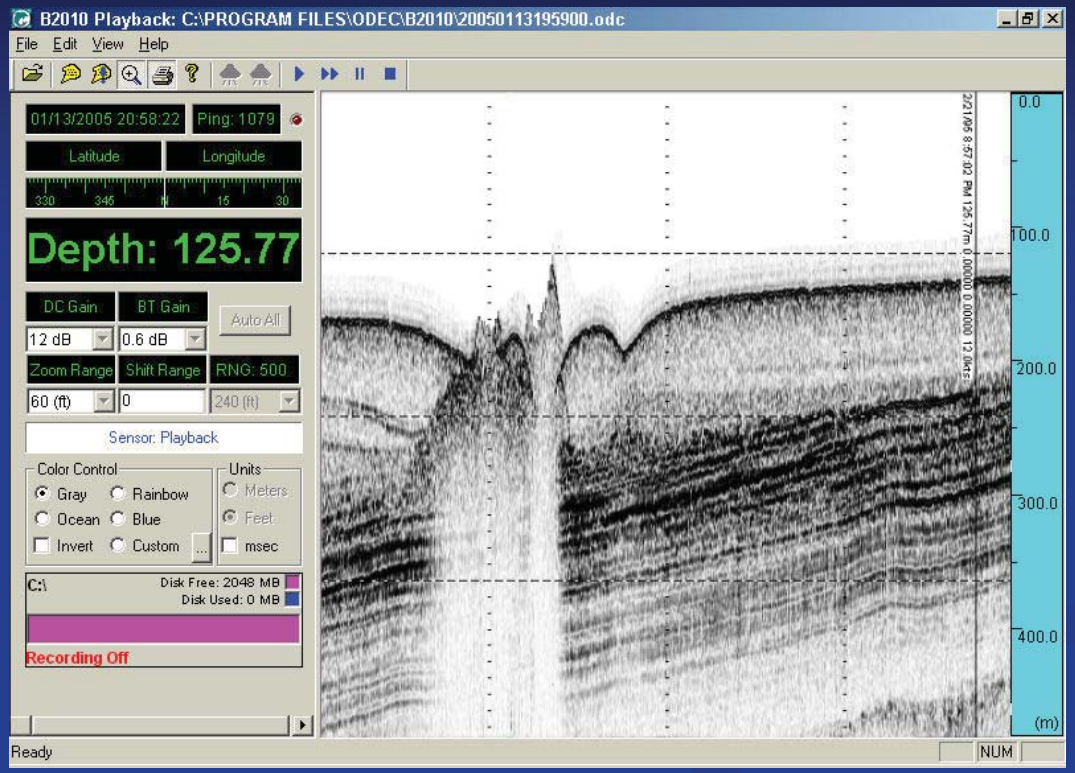


Zoom Modes



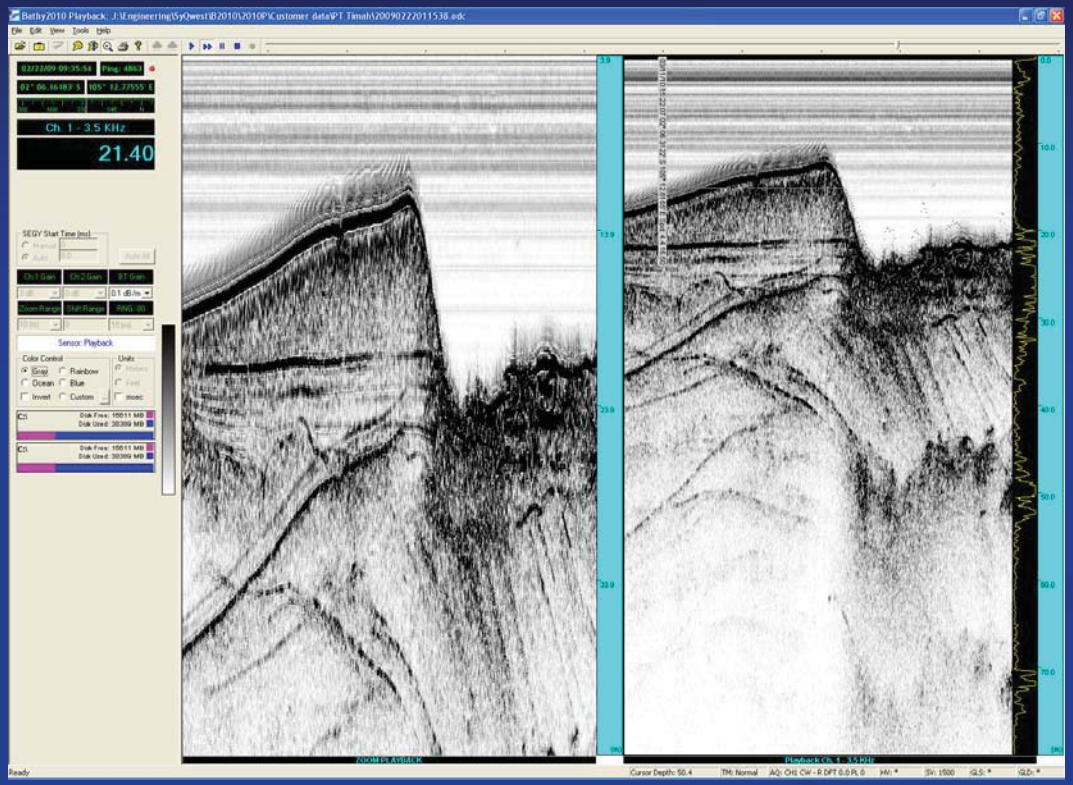
- **Enable GUI Zoom**
- **This option allows the user to digitally scale bottom data from a playback file and can function as a manual zoom.**

Display Modes



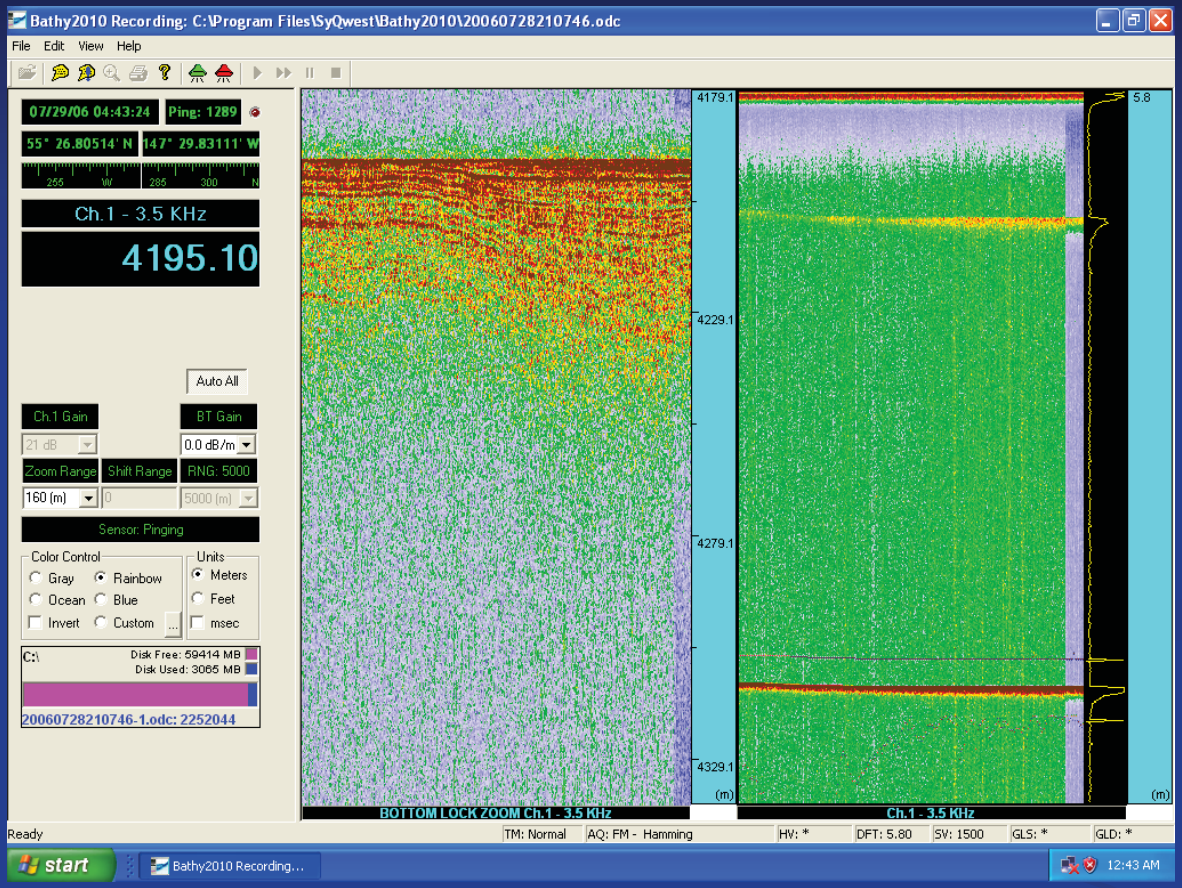
- There are 4 display modes available with Bathy-2010P software, including 3 Zoom modes, and 1 without any zoom.
- Normal
- Bottom Zoom
- Bottom Lock Zoom
- Marker Zoom

Bottom Zoom Mode



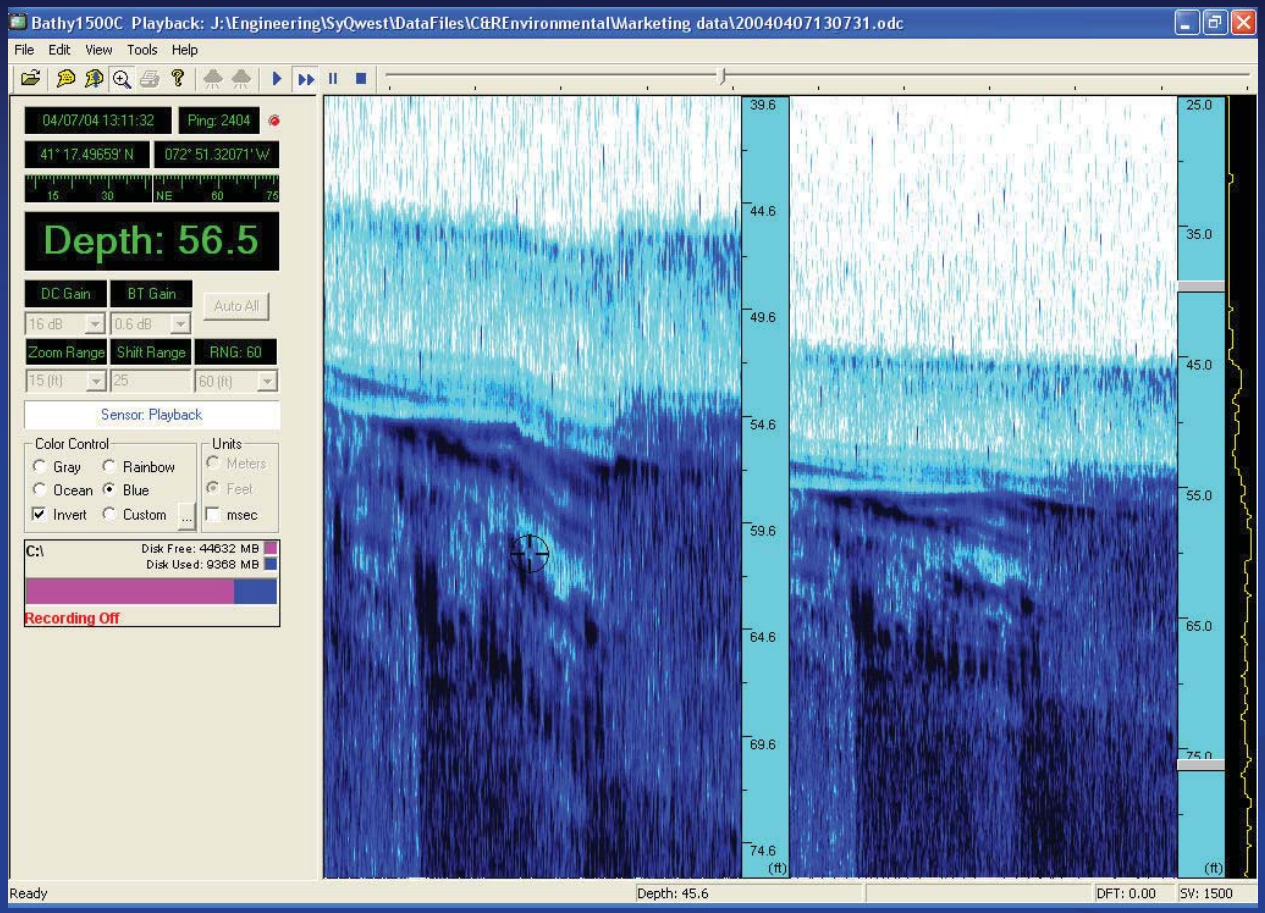
- When selected, this mode will split the viewing area in half. The left side will be used to show zoom information, and the right side for normal bottom data.
- Bottom Zoom mode centers the zoom display around the current depth allowing you to follow it up and down the water column at a high resolution. In addition, the user can use the Zoom Range Control to zoom in or out.
- The Zoom Range value represents the zoom range in whichever units are currently selected. When the zoom window moves up or down to track the bottom, it does so in Zoom Range / 2 increments.

Bottom Lock Zoom Mode



- This mode functions the same way as Bottom Zoom, however it does not show the bottom moving through the water column. Instead, it will lock the bottom to the upper portion of the zoom view so that the user may continuously monitor sub-bottom information.

Marker Zoom Mode



- Like in the other modes, Marker Zoom provides a high-resolution zoomed view of the water column, however in this mode, the user can specify where in the water column the zoom range will begin. This is accomplished by dragging the marker zoom bar up or down the normal view scale bar to the point you want the zoom range to begin. The start of the zoom range can be observed at the top of the zoom window while you drag the marker zoom bar, but the marker zoom isn't set until the mouse button is released.

Help Menu

- This menu includes a software Help guide along with an About Bathy-2010P option. Clicking it will display a window with information such as the Bathy-2010P's software version and SyQwest, Inc.'s company information. In addition, the software will request and display Hardware/Firmware version information from the Bathy-2010P's DSP to ensure it is connected and communicating properly.

Theory of Operation

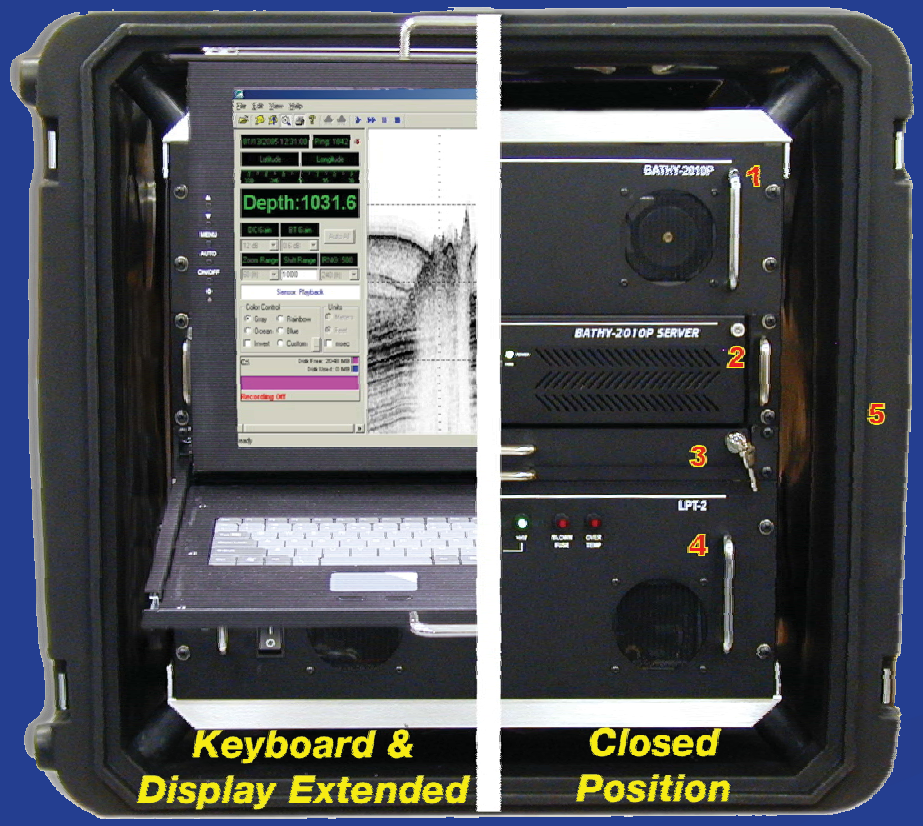
The BATHY-2010P system is configured as a flexible acoustic measurement sensor device capable of both shallow/deep water hydrographic and sub-bottom profiling applications. Each of these applications depend on certain characteristics in order to perform accurately and reliably.

For hydrographic applications, the BATHY-2010P is capable of providing sophisticated algorithms for peak signal detection, automatic modes of: receiver gain, bottom tracking, pulse length and power level controls greatly reduce the probability of inaccurate bottom detection/tracking.

For sub-bottom profiling applications the BATHY-2010P is capable of providing high energy/wide bandwidth transmit waveforms and an advanced bottom triggered TVG processing algorithm to facilitate both maximum bottom penetration along with high resolution layer definition.

Bathy 2010P Installation

The Bathy 2010P system installation is comprised of the following items.



1. Bathy 2010P Sonar Unit
2. Bathy 2010P Server Unit
3. Keyboard / Display Unit
4. LPT-2 Amplifier
5. Portable Rackmount Case
6. Bathy 2010P Transducer(s) Assembly
7. Bathy 2010P Cables (Power, Data, Transducer)
8. Transducer Mounting Hardware
9. 110/220 Volt AC Power Source

Bathy 2010P System Interconnection Diagram

FIND #	PART #	DESCRIPTION	QTY.
	P05500-14	BATHY-2010P TOP LEVEL	
	P05502-X	BATHY 2010P INTERCONNECT DIAGRAM	1
1.	P05505-1	BATHY-2010 SONAR UNIT	1
2.	A000183-1	LPT-2, 3.5KHZ	1*
3.	P05510-1	BATHY-2010P SERVER UNIT	
4.	P05528-1	RACKMOUNT, 17"LCD/KEYBD/TOUCHPAD	1
5.	973690-2	TR109 TRANSDUCER, 3.5KHZ	4
6.	P03059-1	JUNCTION BOX, POTTED w/ Pigtails & 50 Ft DSS-3 Cable	1
7.	P02553	TDU-850 THERMAL PRINTER	0*
8.	C00183-1	CABLE, SONAR CNTRL, EXT B2010	1
9.	C00184-1	BATHY-2010 SONAR POWER CABLE	1*
10.	C00043-1	Bathy 2010/LPT INTERFACE CABLE	1
11.	C00177-1	Bathy 2010/LPT RECEIVER CABLE	1*
12.	P05506-x	Accessories Kit	1*
13.	P05540	BATHY-2010 GUI (INSTALLED, AND 1 BACK UP CD)	1
14.	P05545	BATHY-2010 OPERATORS MANUAL (1 HARDCOPY, 1 on install CD)	1
15.	P03051-2	OTSM, 4 ARRAY	1
16.			
17.	C00153-1	CABLE, AC-POWER LPT-2	1

* DENOTES OPTIONAL ITEMS

* OPTIONAL ITEMS

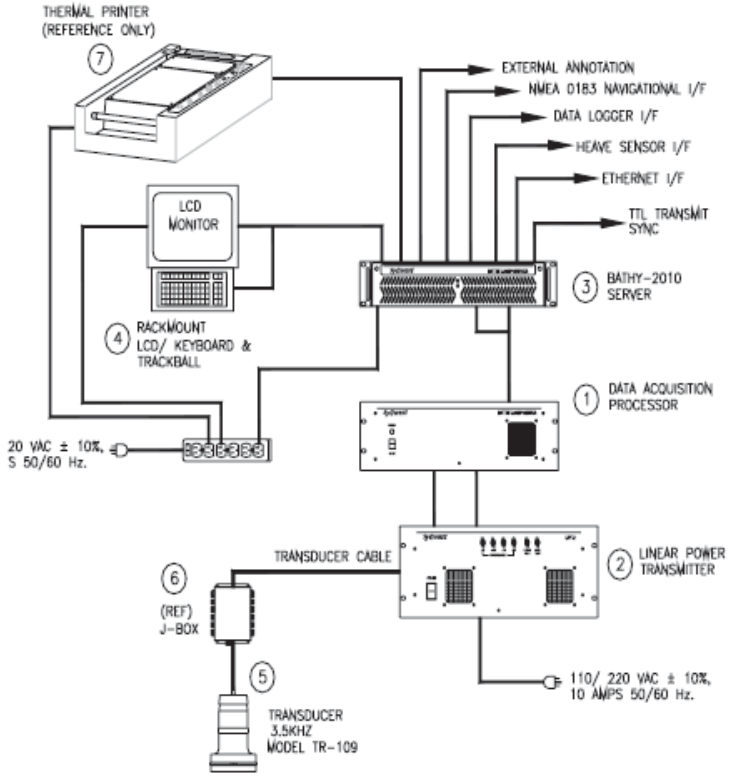


Figure 7-2
BATHY-2010P SUB-BOTTOM SYSTEM TOP LEVEL PARTS LIST
P/N P05500-5

Getting Started

- Unpacking and Inspection

  Use care when unpacking the unit from the shipping carton to prevent damage to the contents. It is also recommended that the carton and the interior packing material be saved even after the unit has been installed on the vessel. In the unlikely event that it is necessary to return the unit to the factory, the original carton and packing material should be used. Verify that all parts described in the next section have been shipped with the unit.

Bathy 2010P Accessory kit

- The following (Table 7-1) is a list of the accessory kit supplied with the Bathy 2010P CHIRP Sub Bottom Profiler / Echo Sounder.

P05306 Accessory Kit

PART NO.	DESCRIPTION	QTY
310-001	Fuse, 1A	**1** (for Sonar Unit)
313-005	Fuse, 5 Amp	**1** (for LPT-2 unit)
6282-8SG-522	Conn, 8 Pin ConXall	**1** (key pulse connector)
MS3106A-16-10P	Transducer Conn	1 LPT-2 Output
MS3057A-8	Transducer Conn backshell	1 LPT-2 Output
*MS3106A-14-7P	Transducer Conn	1 / (dual channel only)
*MS3057A-6	Transducer Conn backshell	1 / **(dual channel only)**

Table 7-1
P/N P05306-x
BATHY-2010P ACCESSORY KIT

Transducers, Accessories and Options

- To complete the Bathy 2010P CHIRP Sub Bottom Profiler system solution the user needs to select the desired transducer(s) for the intended application. The list below shows the most common transducers sold with the Bathy 2010P. Contact SyQwest with any questions or issues regarding the optimum transducer configuration for your application. The other listed items are available to complement and enhance the operation of the Bathy 2010P echosounder. Please contact your authorized SyQwest distributor or visit our web site for information and assistance in obtaining any of these items.

Installing the Bathy 2010P Electronics

Selecting a Location for the Electronics

The Bathy 2010P Sensor Unit is designed for portable, marine applications but maybe used in permanent installations as well. The user must determine if the Bathy 2010P Sensor Unit is to be mounted on the vessel or just placed in a convenient place on-board the vessel. Either way the appropriate location for the unit needs to be determined. The following considerations should be investigated before deciding upon a location:

1. Display Unit - Select the optimum place where data may be viewed.
2. The Sonar Unit must be installed into a 110/220 VAC Power Source. The unit must also provide adequate access for cabling termination without binding, and allow suitable space for servicing the equipment. (If necessary, the data cable may be extended beyond 10 feet.)
3. Water Resistance. - The unit is NOT watertight or splash proof.
4. Environmental. - The operating temperature is –25C to +60C.

Installing the Bathy 2010P Transducer(s)

- **General Transducer**
- The Bathy 2010P is offered equipped with a single frequency or dual frequency transducer that is designed for portable, over-the-side mount applications. It may also be used in permanent installations. Before installing the transducer, the installer should read and understand the appropriate section below to insure that all of the installation issues are considered.

- **Selecting a Location for the Transducer**

- The location of the transducer is very important for maintaining reliable bottom tracking and optimum performance of the equipment. Avoid installing transducers in locations where the transducer will be subjected to turbulent water, air bubbles, or vibration. The best clear water location on most vessels meeting these criteria is approximately 1/3 the length of the vessel, aft from the bow.

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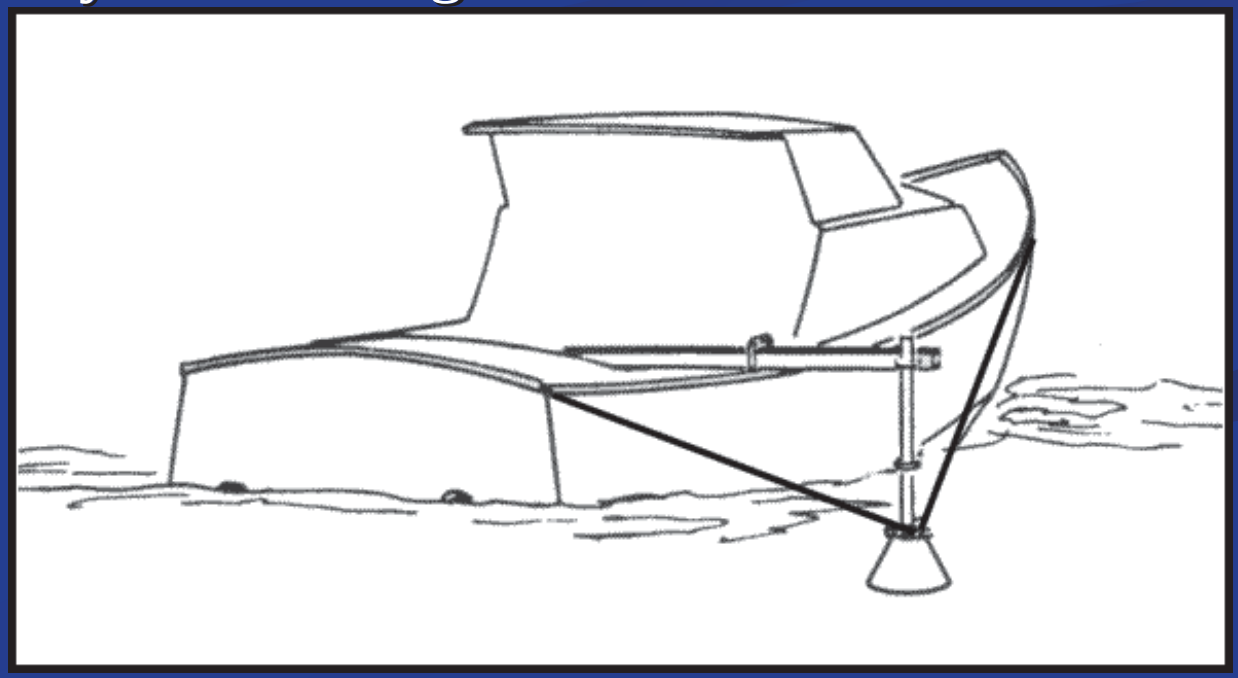


Handling Transducers

- The transducer is the heart of the Bathy 2010P system and, in spite of its appearance and size, is a delicate instrument. Although it is designed to be in contact with and survive tough marine environments, it should not be dropped or mishandled during the installation. Caution is advised when handling the transducer to prevent any damage to the transducer face or radiating surface.
- The transducer and mounting assembly should be as clean and smooth as possible so the path of the sounding energy is uninterrupted. The transducer face must not be painted with lead based bottom paint. In portable applications the transducer and mounting assembly should be cleaned with fresh water after use.
- **WARNING: Do not expose the transducer to any solvents when cleaning any excess sealants. Strong solvents may damage the face of the transducer.**
- Also, when handling the transducer, avoid lifting or pulling on the transducer cable. Although the cable appears thick and substantial, the internal cable wiring could be damaged by stress from the sheer weight of the transducer and cause a malfunction at the most inopportune time.

Over the side mounted transducer installation example:

CAUTION: Never pull, carry or hold the transducer by the cable as this may sever internal connections.

Over The Side Transducer Mounting
(Example mount shown as reference only)

Portable Transducer Maintenance

Aquatic growth can accumulate rapidly on the transducer's surface reducing its performance in weeks. Clean the surface, keeping it free of marine growth and petroleum residue, with a soft cloth and mild household detergent. Inspect the cable periodically for kinks, abrasions and cuts. Repair any damage using an approved waterproofing cable repair system. Inspect connections for indications of corrosion.

WARNING: NEVER USE SOLVENTS!

Certain cleaners, gasoline, paint, sealants and other products may contain strong solvents, such as acetone, which can attack many plastics dramatically reducing their strength. Clean surface of transducer with a mild detergent only.

Permanent Transducer Installation

For some applications it may be necessary and/or convenient to mount the Bathy 2010P Transducer permanently in the hull of the vessel. Due to the construction of the Bathy 2010P Transducer it may be directly affixed to the hull of the vessel. A Seachest Installation can be used, but is not required. Guidelines for performing a Seachest installation are described in the following sections.

Seachest Transducer Installation

Interior Seachest installations are best suited for solid fiberglass hulls to permit a minimum attenuation of acoustic reply signals. Hulls of other type material types may be considered but most other hull types will require that a Seachest design be built into the hull with an acoustic window across the face of the enclosure (i.e. a significant hole must be cut out of the hull).

Inside mounting to the hull does minimize drag to allow faster survey speeds, however, loss of performance may result due to the attenuation loss in the hull.

Locate the transducer where the hull is solid fiberglass resin to maximize sound transmission. Do not locate over balsa wood core material. Consult the hull manufacturer if you are unsure of the core material or the best location. Never bond large resin housings directly to the hull; always use a liquid-filled box.

In any permanent installation the intended final configuration should be tested before it is implemented, if possible.

For more information regarding the installation of a Seachest or other permanent transducer mount, refer to our website at http://www.syqwestinc.com , or contact us directly.

Bathy 2010P Host PC Electrical Connections
GPS Connection

- Connecting a GPS or other Navigation input to the PC running the Bathy 2010P™ software allows the user to store and annotate Date, Time, Position, and Heading information to the Acoustic data returns.
- The Bathy 2010P PC Software supports the NMEA 0183 protocol on a COM port that is software selectable by the user. When selecting a PC to use with the Bathy 2010P system the user should ensure that PC hardware supports multiple COM Ports if a Navigation input is desired. The user should refer to the GPS NMEA 0183 output connection information in their GPS Manual as well as the PC COM port wiring information in their PC Manual to insure that the Navigation input is wired correctly.

Bathy 2010P Depth Data Output & External Event Connections

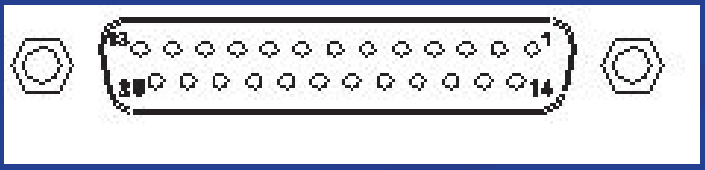
The Bathy 2010P PC Host application software also supports serial port connections for the Depth Data output and External Event input that are typical associated with interfacing to CHIRP Sub Bottom Profiler Hydrographic Survey and Post-Processing Software packages (i.e. Hypack Max, HYDROpro, SonarWizMAP+SBP ..).

Printer Connection

The Bathy 2010P PC Software allows the user to interface to the all of the SYQWEST TDU Thermal Printers. The connection is established through the PC's Parallel Printer Port (25-pin D-Type) as shown below in Figure 6-9. Once the software has been started, all displayed acoustic data can be printed to the TDU in either Acquisition or Playback mode.

The standard TDU Printer cable is provided with the printer and is 12 feet long and does not require any user wiring. Installers must locate the printer accordingly.

PC Printer Port



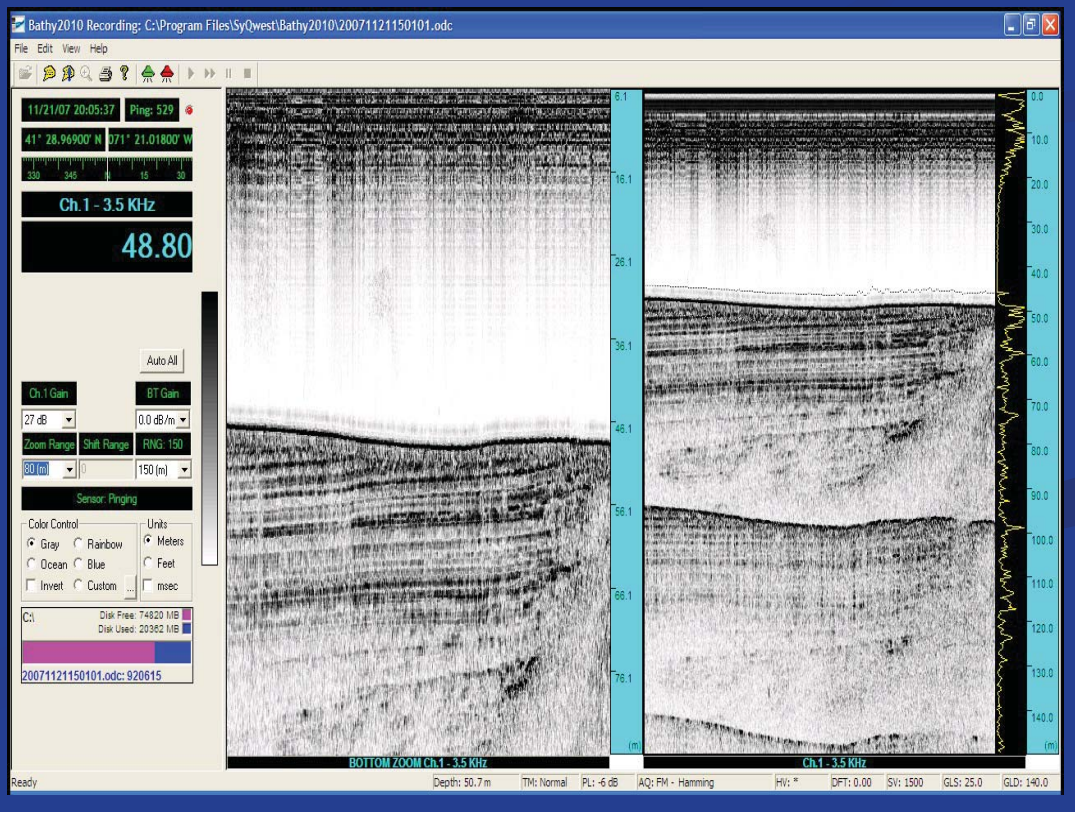
Bathy 2010P PC Software Installation

This section describes how to install the Bathy 2010P PC software package. It is assumed that the reader has a working knowledge of installing Windows 95/98/2000/NT/XP® software. The installation software is located on the CD-ROM disc included with your Bathy 2010P.

NOTE* It is recommended that you exit all running applications before inserting the CD and beginning the installation.

To install the PC software, insert the Bathy 2010P CD into an available drive. If **Auto Insert Notification** is enabled on the CD-ROM drive, then the Bathy 2010P PC installer will begin automatically. If the CD does not auto-start, simply execute the SETUP.EXE file in the root directory of the CD.

Once the installer is running, it will verify that your operating system is compatible with the Bathy 2010P software, and then it will check which version of the Windows Installer program is installed in your system. If the Windows Installer program is not found or out of date, it will update it and prompt you to restart your computer. Once restarted, the Bathy 2010P installation will continue automatically.



End of Installation