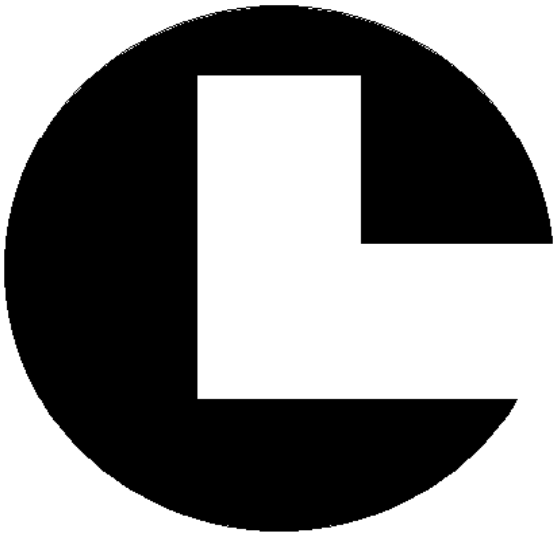

COASTAL'S
MACRO SERIES
OPERATION MANUAL

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1 Introduction

This manual describes the operation and general use of Coastal Leasing's MacroSeries of instrumentation. The information is correct at the date of completion, but is subject to change.

Coastal's instruments are built with simplicity of operation in mind. Highly integrated hardware and software create a generation of oceanographic, environmental, and meteorologic instrument systems. MacroSeries instruments have been used to measure directional waves, wave height, tides, current flow, temperature, water level, turbidity, dissolved oxygen, acceleration, tilt, wind speed and direction, air pressure, and many other parameters.

2 Getting Started

Note the following checklist of important items.

- **If you ignore these, data may be lost and equipment damaged or destroyed.**

Unpack the instrument. Notify Coastal Leasing immediately if the box contents and packing list do not agree.

Check out the instrument immediately after receiving it as shipping damages some instruments. Deploying a broken instrument only leads to frustration and additional expense. Report any malfunction to Coastal immediately.

Handle the sensors with great care, especially the Marsh-McBirney current sensor, the Falmouth Scientific CTD sensor, and Paroscientific pressure gauges. The current sensor probe has soft graphite electrodes which are easily gouged or damaged. The CTD sensor is encased in ceramic which can be easily chipped or broken. The Paros pressure sensor will be permanently damaged if overranged by 20%.

Sensor operation should always be verified prior to any deployment. Simple bench or field tests should be sufficient for most applications. This involves **M**onitoring the instrument under known conditions, and making sure that sensed parameters are consistent with ambient input or controlled excitation. This should always be done before deploying a MacroSeries instrument.

Carefully **E**xamine the data as soon as possible after data collection. If something goes wrong during the retrieval of data, or the data appear unreasonable, resolve the problem before re**I**nitializing the Macro instrument. Start by consulting the other chapters in this manual. If the problem is still unresolved, call Coastal. There may be some chance to retrieve the data.

Never modify the equipment. **Do not open or tamper with the electronics, sensors, or compact flash; these are not user serviceable.**

With all this in mind, you are now ready to deploy the instrument.

2.1 Pre-Deployment

This section assumes the instrument is being deployed for the first time, there is no data in the instrument to be **R**ead, and there is no maintenance required on the instrument. When an instrument arrives from Coastal Leasing, Inc., the Startup Parameters have been set to start into the future. The battery capacity has been checked to verify that they will be sufficient for the planned deployment, or fresh batteries have been installed. Under most circumstances the instrument does not need to be opened.

Setup your PC. You need an IBM PC or compatible with at least 512 kb of memory available and a serial port. Copy the files on the Wizard disk to a subdirectory of your choice on your hard drive. See: 3.1 Installing Wizard.

Connect the XSJ-7-CCP bulkhead connector end of the serial communication cable supplied by Coastal to the MacroSeries system. Connect the DB-9 connector end to the serial port (COM1) on the PC. If your PC does not have an available COM1, then COM2 can be used if necessary as described in the **U**tilities Section. **Do not connect to the parallel port of the PC.**

Use extreme care in aligning the keyway of the end cap's connector. Do not force insertion as you may irreparably damage the connector. Be sure that when reinstalling the XSJ-7-DSP dummy sealing plug or communications cable that the mating surfaces are clean and that a facial O-ring on the BCR is in place.

Check the PC clock. Wizard uses the PC clock to set the Macro instrument clock. If necessary, change the PC clock by using the DOS TIME and DATE commands. If you are unfamiliar with these commands, consult your PC's user's manual.

On your PC, move to the directory where the Wizard program resides (i.e. C:\PROG\COASTAL\WIZARD). If you need to load Wizard onto your PC, see 3.1 Installing Wizard. Run the program by typing *Wizard* [Enter]. Hit any key to get past the title page.

You will now want to **I**nitialize the instrument with your specific sampling parameters. Once the instrument has been **I**nitialized, you will want to **M**onitor to verify sensor operation and deployment settings. See: 3.3.4 **I**nitialize and 3.3.5 **M**onitor for instructions on doing this. Exit Wizard by pressing [Esc], and disconnect the instrument from your PC. Your Macro instrument is now ready to be deployed.

2.2 Deploying Instrument

Before deploying your MacroSeries instrument into water, make sure that the communications port is sealed with supplied dummy plug. Lubricate the O-ring on the plug as well as the facial bulkhead O-ring with silicone grease and insert into port making sure that the key and keyway are aligned. **Do not force the plug into the port as this may irreparably damage port pins.**

The MacroSeries instrument is calibrated to be deployed in an upright position, with the handle on top. It is possible to deploy it in other orientations, however, an offset will need to be used in later calculations.

All dissimilar metal to metal contact must be avoided in order to minimize the risk of corrosion of the instrument's housing. Make sure that the zinc anode is attached to the top plate and has continuous electrical contact to the housing with either a metal bar or wire. In instruments such as the MacroFlow which have an internal compass, nonferrous materials should be used so that the compass measures accurately.

In deployment and recovery, it is essential to avoid all direct impact to any external sensor. For example, the carbon electrodes on the Marsh McBirney sensor which protrude from the sensor assembly are extremely delicate, and can be fractured or damaged by impact.

All deployments are generally site, instrument and project specific. For ideas on which type of deployment is right for your use, it is best to contact Coastal directly.

2.3 Recovering and Stopping Instrument

After taking the instrument out of the water, it should first be rinsed in fresh water. Note any possible damage to the case or top plate assembly.

Once the instrument is recovered, the Wizard **R**ead and **E**xamine (Sections 3.3.2 & 3.3.3) functions are used to recover and review data. The best way to stop the instrument after reading data is to **I**nitialize instrument to start at a distant future time. Otherwise, the data remains in the instrument and the instrument keeps sampling until the memory is full, the batteries are drained, or the unit is re**I**nitialized. Remember that re**I**nitializing erases all previous data, so download all data before re**I**nitializing.

3 Software - Wizard

The Wizard software that accompanies the instrumentation is a menu driven, PC compatible program complete with on-line Help, accessible by pressing the [F1] key at any time. The Wizard software runs all of Coastal Leasing's Macro Series series of instruments. Only one copy of Wizard is required.

☒ **NOTE**: At this time, the new Wizard V. 6.02, designed for the MacroSeries, is not compatible with the older Wizard V. 5.07 and earlier, designed for the Micro/Mini Series of instruments. In the near future, they will be compatible and new versions of the software will be distributed.

3.1 Installing Wizard

Before you can run the Wizard program, it must be installed onto the hard drive of a PC. It is recommended that the Wizard software be installed into its own sub-directory. To install the Wizard software, insert the supplied floppy disk into the drive and enter the following command:

INSTALL S: D:\[PATH]

where *S* : is the source floppy drive (usually *A*: or *B:*).
D: is the destination drive. (usually *C:*)
PATH is the optional full directory path on the destination drive.
(Directory must already exist on drive).

Example: *INSTALL A: C:\PROG\COASTAL*

☒ **NOTE**: If no path is specified, the install routine will create a directory: *C:\PROG\COASTAL\WIZARD* and install all of the files into it. This is the standard default and is the usual pathway used.

☒ **NOTE**: If you already have Wizard 5.07 installed and wish to continue to use it for Micro/Mini instruments, be sure to designate a new pathway for Wizard 6.02, ex: *...COASTAL\WIZARD\6.02*

The file format of the Wizard program is:

Wizard	Executable files
Wizard\Prm	Parameter files
Wizard\Doc	Help files
Wizard\Dat\Raw	Raw data files
Wizard\Dat\Prc	Processed data files

💣 **It is very important that the Date and Time of the PC is correct as the Wizard program uses these to set the start of the deployment. Check them before running Wizard and if they are wrong, change them.**

3.2 Running Wizard

To begin using the Wizard software (after it has been installed), first switch to the directory containing the Wizard program. For example, if the program resides in a directory called C:\PROG\COASTAL\WIZARD, type:

CD\PROG\COASTAL\WIZARD and press [Enter].
Then type *Wizard* and press [Enter].

Once loaded, Wizard will display a title page. Press [Enter] to start using the program.
When running the Wizard software, remember the following:

☺ **Wizard is user friendly and includes on-line help to answer questions. If unclear about a Wizard prompt, press the [F1] key to retrieve any available help.**

Wizard makes extensive use of menus. Making a menu selection can be done in two ways: press the key of the first letter of the desired selection, or move the highlight using arrow keys. Once your selection is highlighted, press [Enter]. Wizard will follow a standard sequence of **R**ead, **E**xamine, and **I**nitialize, so in most cases you can proceed through the menus by simply pressing [Enter]. However, the first time an instrument is used, start with the **I**nitialize function.

Pressing [Esc] generally aborts a step and returns to the previous menu or question.

The standard screen has several windows:

Instrument	Top left	Summarizes instrument configuration and deployment.
Main	Center left	Shows key menu function accessed by highlighting.
Function	Bottom left	Reports function, status; defines required inputs.
Version	Top right	Reports Wizard version and computer date and time.
Gauges	Center right	Shows battery and memory status.
Alert	Bottom right	Prompts for input.

3.3 Wizard Commands

QUIT	Exit program and return to system prompt.
READ	Download raw data from the instrument into files on the PC.
EXAMINE	Display raw data files as plots or as a listing.
INITIALIZE	Start or restart your deployment. Erases old data making all memory available.
MONITOR	Display instrument's readings in a real time mode.
PROCESS	Convert raw data files into ASCII files with engineering units.
UTILITIES	Support functions and information.

3.3.1 Quit

This option will **Q**uit the Wizard program and return to the system. A yes/no question is asked prior to **Q**uitting of the Wizard program.

3.3.2 Read

This option is used to download any raw data that resides in the instrument's memory. If your instrument has a compact flash, you may read your data either serially through the instrument, or externally through a compact flash reader. 💣 **Do not remove the compact flash without following the procedure described below or you may lose a portion of your data.**

To Read serially: Once the **R**ead option is selected, the program will ask the instrument for its settings. Then it will verify the downloading of the data with a yes/no question. If [Y]es, the data will be loaded into memory and then offloaded into a file on the PC. The first 3 Characters of that file name will be the calendar day the instrument was **I**nitialized, followed by the 4 least significant numbers of the instrument's

serial number, followed by an "R". The file extension will be the file number of the raw data file. Example: 2653122R.001 means that it is the first (001) (R)aw data file for instrument number 1(3122) which was **I**nitialized on the (265)th day of the year. With multiple files, the extension will change to show the file number. Example: 2653122R.002.

The program will alert you if a file with the same name already exists in the directory. It will overwrite the old files, so if the old files are important, select [N]o, press the [Esc] key, and **Q**uit the program. Then either rename the old files, or move them into another directory.

Once all the raw data has been offloaded from the instrument, the Wizard program will automatically select the **E**xamine option.

To Read through Compact Flash reader: If you have a lot of data, you may wish to **R**ead the data externally in order to speed up the process of downloading. First go to **U**tilities, and select the Connect option. When in the blue screen, at the prompt, type *!W* to write the remainder of the data from the logger to the flash card. Next, type *!^* to close the file and prep the flash card for removal. You will be prompted to *remove the power from the logger, then remove compact flash.* To do so, open up the white electronics box, unclip the phone plug marked Power on the logger board, and remove the compact flash card. Then place the flash card in the reader to read the data.

3.3.3 Examine

The **E**xamine option uses two formats to display the raw data.
The **P**lot option shows graphs of the data, and the **L**ist option lists data as a time series.

Plot Displays auto-scaled graphs of average and/or burst data. Each page can display up to 256 data points. The deployment title, type of data, instrument name, software version, and serial number are displayed at the top of each page. The channel number, sensor type and engineering units are displayed for each channel. Bursts are referenced by minute:second and averages are referenced by hour:minute.

These special keys control the plot window:

[Esc]	Exits display mode.
[Enter]	Displays next page of data.
[Space]	Displays next page of data.
[Other keys]	Pause or resume automatic paging.

List Lists average or burst data as a time series. The date/time and data type (sequence and year, if the window is big enough), are displayed at the window top. If there is room on the screen, the time is displayed to the left of each sample. Bursts are stamped with seconds and hundredths. Averages are stamped with hours and minutes.

These special keys control the listing window:

[Esc]	Exits data listing mode.
[Enter]	Scrolls a line and then pauses.
[Space]	Scrolls a window, and the pauses.
[Other keys]	Pause or resume scrolling.

3.3.4 Initialize

This option is used to set and start your next deployment. It will erase any previous data stored in the instrument, so **never Initialize an instrument until all previously collected data has been Read.**

It is very important that the Date and Time of the PC is correct as the Wizard program uses these to set the start of the deployment. Check them before running Wizard and if they are wrong, change them.

Once selected, Initialize will request the instrument's attention, and then load the settings from the instrument into the program. The Deployment Settings window will then be displayed.

- Enter a Deployment Title of a maximum of 31 characters. Then enter a start date and time for averages (and/or bursts if supported). This is the date and time of the very first sample to be taken.

  - A new option in the Macro Series software is Sampling Enable Interval and Period: To default out of using this option, simply enter 0 in both sections.

  - Enter a Sampling Enable Interval. Entering 0 here means that sampling, as defined by the burst and average sections below, will ALWAYS be enabled, regardless of the Sampling Enable Period setting. Entering a non-zero number here means that sampling will only be enabled every time this number of minutes has elapsed. The start of the first such interval will be the same time as the start of your earliest defined burst or average sample. The number of minutes it will be enabled for is defined by the Sampling Enable Period.

  - Enter a Sampling Enable Period. When Sampling Enable Interval is set to a non-zero value, entering 0 here means that sampling will ALWAYS be DISABLED, regardless of settings in the burst and average sections below. Entering a non-zero value here means that sampling will be enabled for that many minutes. During this period, sampling will take place as defined in the burst and average sections. The number of minutes between each of these enabled periods is defined by the Sampling Enable Interval.

  - EX:

Interval	Period	Action
0	any #	Sampling is always enabled
non-zero	0	Sampling is always disabled
60	15	Enabled for 15 min every hour
1440	120	Enabled for 2 hours every day

- Enter an average (and/or burst if supported) Interval in Minutes. This is the interval of how often you want to acquire a new set of average (or burst) data. A new set of data will be initiated every time this many minutes has elapsed.

- Enter the average (and/or burst if supported) Sample Period (.01sec). This is how often you want to sample the sensors during an average or burst acquisition. This number is in hundredths of seconds, so a entry of 50 represents 1/2 second.

- Enter the Average Samples to Average (and/or Number of Samples to Burst, if bursts are supported). This is the number of sample sets of the sensor you want to average together, (or the number of burst sensor sets you want to record). If 60 is entered for an average mode and its Sample Period is 50 (1/2 second), the instrument will stay on averaging the sensors every 1/2 second, and stay on for 30 seconds (60 x 1/2 second). If 512 is entered for a burst mode, and the Sensor Period is set to 50 (1/2 seconds), then the instrument will stay on for 256 seconds (512 x 1/2 seconds), recording each of the 512 sensor samples in memory.

✉ **NOTE:** Wave spectral analysis programs require the Number of Samples to Burst to be a power of 2. (64, 256, 1024...)

If both bursts and averages are enabled, and both a burst and an average are to occur at the same time, the burst takes priority.

You also have the option of turning on or off each individual sensor that is available in either average mode or burst mode. 💣 **Be careful not to disable any parameter that you want to record.**

The **M**onitor mode parameters can also be changed, however the default settings are usually adequate as these settings only affect the real time monitoring of the instrument.

As any of the parameters are changed, the Deployment Limit is recalculated based on memory or battery, whichever is the limiting one. When all of the settings are correct, hold the [Ctrl] key down and press [Enter] to accept the settings and send them to the program. The program will ask if you want to continue with **I**nitialization by saving the parameters. Enter *Y* and press [Enter].

It will then ask you to write these parameters to a file with a name of the instrument serial number and extension of .PRM. This file name will most likely already exist on your PC's hard drive and the program will warn you of this. There is very little reason to not overwrite this file if the data from the instrument has already been read. Even if this is the first deployment of the instrument, the file on the disk has no real deployment settings, so it is safe to overwrite.

Once the file has been written to disk, the program will ask you to **I**nitialize the instrument. There is a warning about losing any existing data at this point, so if the data in the instrument are important, and have not been **R**ead yet, enter *N* and **R**ead it, otherwise enter *Y*.

The instrument is now set, and will start recording data based on the parameter settings. Use the **M**onitor function now to verify sensor operation and deployment settings.

3.3.5 Monitor

This option shows the real-time readings of the instrument's sensors. It is helpful in checking to see if the instrument is operating correctly. Data is displayed in the engineering units selected for the deployment.

3.3.6 Process

This option converts raw data files into processed ASCII files in engineering units. Data file names look very similar to the raw data file names. The first 3 characters of the file name will be the calendar day the instrument was initialized, followed by the 4 least significant numbers of the instrument's serial number, followed by an "A" for an average file or a "B" for a burst file. The file extension will be the file number of the processed file. Example: 2653122A.001, 2653122B.001. With multiple files, the extension will change to show the file number. Example: 2653122A.002, 2653122B.002. All processed data files are comma delimited ASCII type files, so they are easily imported into many spreadsheet programs.

3.3.7 Utilities

A few **U**tilities are available with this option.

About	Useful for finding out about the instrument's deployment settings, Wizard program, and Coastal Leasing, Inc.

Connect — This **U**tility will allow you to to check on many functions of your nstrument. It is most commonly used to change the serial port settings of the PC. Go to Connect and press [Enter]. If the instrument is communicating properly with the PC, a *10678 CL8>* prompt will be displayed. (If the prompt does not appear automatically, try pressing [Alt-W].)

In most cases, the settings should be: COM1, 19200 Baud, No Parity, 8 bits, 1 stop bit. To change any of these communication parameters, press the [F2] key, and the Communication menu will be displayed. Select and change any settings that may be incorrect. Use the up/down arrow keys to select changes and the [Enter] key to make them. Press the [ESC] key to get back to the prompt. Pressing [ESC] at the prompt, and answering *Y*, will escape the Connect option and bring you back to the Main Menu.

4 Maintenance

4.1 Hardware: O-rings, & Anodes

It is recommended to use fully cleaned or new O-rings for every deployment. Three O-rings should be in place: 1 on the outside rim of the top cap; 1 in the face seal of the bulkhead connector (communications port); and 1 on the end of the dummy plug. Be sure to carefully clean not only the O-rings, but also the O-ring mating surfaces on the pressure case and end cap with isopropyl alcohol. Lubricate the O-rings lightly with silicone grease, (Dow Corning DC-4 or Parker O-ring lubricant is recommended), being sure in the process to check that the rings are clean and free of surface defects (cuts, hair, dirt, etc.) which would prevent proper sealing.

Once the O-rings have been seated, the pressure case should be closed. Carefully slide the electronics into the housing and secure the screws. Make sure that the zinc anode is attached to the top plate and has continuous electrical contact to the housing with either a metal bar or wire. This can be done with an ohmmeter, making sure that there is negligible resistance between the anode and the case. Replace zinc anode (CAMP 34762) when it has lost as much as a half of its mass - or earlier if the rate of deterioration of the anode so indicates.

4.2 Batteries

Prior to replacing batteries, make sure that any existing data has been **R**ead from the instrument. Re**I**nitializing will erase all previous data. Next, open the Macro instrument pressure case by taking out the screws and sliding the electronics carefully out of the case. Each battery board consists of 9 alkaline 'D' cells. Paper tubes are used to hold individual 'D' cells in stacks. Alternately, Bright Star Battery Company Model 7542 triple 'D' cells are also suitable. Remove **all** batteries from the board and check the battery contacts for any signs of corrosion. If all looks good, replace one stack at a time, securing with thick elastic bands.

✉ **NOTE:** When changing the batteries, remove **all 3** stacks from the battery board before replacing any 1 stack.

The '1/3N' cells, located in the plastic electronics box, will not need to be replaced as often as the 'D' cells as they are only used as a backup power device. 💣 **DO NOT remove both the 'D' cells and the '1/3N' cells at the same time** or the instrument will have to be entirely reprogrammed.

After replacing batteries, note the battery voltage displayed in the lower corner of the Wizard screen. The voltage should read about 12.5 V.

5 Troubleshooting

When an instrument is initially connected to the computer and the Wizard program is started, if no response is received, an error message will be displayed: *The instrument is not responding, check connection.*

Although not all of these problems can be solved in the field, there are some short procedures which can be used to quickly resolve the occasional problems of a MacroSeries instrument.

1. a) The first thing to do is to check the physical cable connections. Disconnect and reconnect all cables to see if there was a bad connection.
   b) Try using a different computer and/or a different instrument to see if the problem is a bad serial port.
   c) Make sure that the batteries are supplying sufficient power to the instrument (at least 3 volts per stack of 'D' cells) and that the battery stacks are all making electrical contact.
   d) There could be a problem with the wiring in the external bulkhead connector. To check this, first disconnect the Bulkhead Adapter from the Interface Cable. Next, remove the instrument from its case, unscrew and remove the white plastic cover on the logger, & plug the Interface Cable directly into the COM1 phone jack (bottom row, second from the right). Retry Connecting to the instrument.

If these initial steps produce no results, you should use the built in communication program in the Wizard software to continue troubleshooting.

2. From the main menu of Wizard, select Utility and then Connect. Along the bottom of the Connect screen, the communication parameters are displayed. In most cases, the settings should be: Com1, 19200 Baud, No Parity, 8 bits, 1 stop bit. To change any of these communication parameters, press the [F2] key, and the Communication menu will be displayed. Select and change any settings that may be incorrect. Use the up/down arrow keys to select changes and the [Enter] key to make them. Press the [Esc]ape key when finished to get back to the Connect screen.

3. After parameter verification, you should have one of three outcomes:
   a) *10678 CL8>* prompt is the normal response. (#s correspond with the serial number)
   b) *10000 CL8>* prompt means that the parameter files have been lost, but if a compact flash card is installed, data may still be recoverable.
   c) a blinking cursor means that the instrument has become deprogrammed and any data that may have been taken may or may not be recoverable.

4. If there is a *10678 CL8>* prompt and the instrument is still <u>not</u> responding, (which is unlikely), the problem is probably with the serial port of the PC. Try another computer.

5. If there is a *10000 CL8>* prompt, and you have a compact flash card with data which needs to be recovered, first type *!C mm/dd/yyyy hh:mm:ss* (the current month/day/year[space]hour:minute:second) and press [Enter]. Then type *!G*. First, you will see "*First make sure the logger clock is set*," which you just did. Then when the screen asks if you want to restore parameters, press [Y]. You should see the *10678 CL8>* prompt. If not, press [Alt-W] to wake up the instrument and the prompt should appear. [Esc]ape from the Connect screen and Read the data as you normally would.

6. If there is a *10000 CL8>* prompt and there is no compact flash card, any data, along with the instrument's parameter files, have been lost, and the instrument needs to be Recalibrated. See following instructions: "Recalibrating the Macro Series Logger."

7. If there is merely a blinking cursor,
   a) First, press [F2], arrow down to the Baud settings, press [Enter], arrow down to 9600 and press [Enter] again to change the baud rate. Press [Esc] to return to the Connect screen.
   b) If a *TOM8>* prompt appears, press [G], then [Enter]. The screen will say that it's "*jumping to address #####*" and then a line of "gibberish" will appear. Change the baud rate back to 19200. A *10000 CL8>* prompt should then appear. Follow above Step 5 directions, or following instructions " Recalibrating the Macro Series Logger."
   c) If the *TOM8>* prompt does not appear, change the baud rate back to 19200, and go to step 8.

8. If there is still no response from the logger, it can easily be reprogrammed according to the following directions. Note that if the instrument has a compact flash card, data may still be recoverable. If there is no additional flash memory in the instrument, the data is lost.
   a) Disconnect the main battery supply by disconnecting either the modular phone plug on the battery board or the Power phone plug on the bottom right hand corner of the logger.
   b) Remove the red jumper located between the small 1/3N batteries on the logger board.
   c) Wait approximately ten seconds, then reconnect the main batteries by reconnecting the modular plug. Next, reinsert the red jumper onto the logger board.
   d) Go to the Connect screen.
      - If there is no compact flash in the instrument, the *10000 CL8>* prompt should appear. Recalibrate the instrument with following instructions: "Recalibrating the Macro Series Logger."
      - If the instrument has a compact flash, it might take a minute before the *10000 CL8>* prompt appears. Follow above step 5 to retreive data from the compact flash.

9. If none of the above steps restores communications, the remaining options would be:

   a) Coastal could possibly send an exchange set of electronics.
   b) To be absolutely sure the problem is solved, consider sending the entire system back for checkout and service.

5.1 Recalibrating the MacroSeries Logger

From the directory in which you will start the WIZARD program, (example, C:\WIZARD\), enter the following to start WIZARD in the Programming & Calibration mode: *(ex. C:\WIZARD\) Wizard -PROgram* [Enter]

The title page will appear showing information such as WIZARD version and the start time of this session, but most importantly it indicates that the Wizard Programming and Calibration Utility is in use.
[Hit any key to continue]

A four item Main menu will appear. Arrow down until the Calibrate option is highlighted. Press [Enter] to select this option.

Select from files matching: prm.prm*
press [Enter]

A list of parameter files will be displayed. Use the up/down arrow keys to highlight the correct serial number. Press [enter] to checkmark the file and hold the [ctrl] and [enter] down together to send the parameter file to the instrument.

WARNING! This discards stored data. Calibrate instrument? N
Press [Y] to continue
Note! M8 deployment will start in 1 month. To alter, reinit after cal.

This message means the instrument will start to take data one month after calibration is complete. (You should, after quitting the Programming & Calibration mode of WIZARD, run WIZARD and Initialize the instrument with real deployment settings.)
[Hit any key to continue]

The instrument's attention will be requested, and the parameter file will be sent to the instrument. It will then digest the parameters. The program will then request the instrument's attention and load the settings from the instrument.

The four item Main Menu will appear. Select Quit and quit the Programming & Calibration utility of Wizard.

Start WIZARD as you normally would, (type: *Wizard [Enter]*) and Initialize the instrument.