**PLEASE SET LOCAL DATE AND TIME BEFORE PROCEEDING.**

Turn the Ballast-Check 2 ON and wait 5 seconds, press the DATA button, use the down arrow key to select SET DATE/TIME and press ENTER. Select Date, press ENTER and use the arrow keys to set the Date as MM/DD/YYYY, press ENTER when finished. Select Time, press ENTER and use the arrow keys to set the Time as HH:MM, press ENTER when finished.

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### 1 Setting Ship and Tank Values

**To set SHIP label:** switch on the instrument and press SHIP while on the HOME screen.

1. Use the ←→ arrow keys to scroll to the first desired space.
2. Use the ↑↓ arrow keys to cycle through alphanumeric values 0-Z and then scroll to the next desired space.
3. Press ENTER when done. This label is stored in the datalog and displayed with the data output for each measurement.

**To set TANK label:** press TANK while on the HOME screen.

1. Use the ←→ arrow keys to scroll to the first desired space.
2. Use the ↑↓ arrow keys to cycle through alphanumeric values 0-Z and then scroll to the next desired space.
3. Press ENTER when done. This label is stored in the datalog and displayed with the data output for each measurement.

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### 2 Measuring a Sample

Read section 4.2 Sample Handling Guidelines in the users manual before proceeding.

1. Aspirate a small amount of sample into your 60cc syringe to rinse any residual from your previous sample and purge it from the syringe.
2. Aspirate 50cc of sample into your syringe.
3. Using the sample in your syringe, rinse a glass cuvette 3 times, then fill the cuvette 3/4 full.
4. Dry and clean all faces of the cuvette using Kim Wipes.
5. Insert the cuvette into your Ballast-Check 2 and close the lid.
6. Turn the Ballast-Check 2 on with the ON/OFF button. Wait 5 seconds for the unit to power on.
7. Press READ.
8. The message “SHIP/TANK OKAY?” will be displayed and you’ll be prompted to select “YES” to proceed with measuring or “NO” to return to the HOME screen to enter the correct SHIP and TANK values. To select “YES” press the ENTER key and you will be prompted to press the READ button to continue with the measurement.
9. Press READ and the measurement will begin.
10. If LOW risk is displayed, the measurement is complete and you can read Abundance and Activity values for that sample by pressing the ↓ key.
11. If HIGH Risk is displayed, you may be prompted to insert a 10 micron sample.
12. Attach a 10 micron filter capsule to your 60cc syringe.
13. Remove the cuvette from your Ballast-Check 2 and discard the sample.
14. Using the remaining sample in your syringe, rinse the glass cuvette 3 times, then fill the cuvette 3/4 full with your 10 micron filtered sample.
15. Dry and clean all faces of the cuvette using Kim Wipes.
16. Insert the cuvette into your Ballast-Check 2 and close the lid.
17. Press READ. Results will be displayed as HIGH or LOW risk. The measurement is complete. Associated Abundance and Activity values can be viewed by pressing the ↓ key.
18. Remove the cuvette from the Ballast-Check 2 and discard the sample.
19. Remove the 10 micron filter from your 60cc syringe and discard the sample remaining in the syringe.
20. Rinse the syringe 3 times with deionized water.
21. Using the filter washing kit, backwash the 10 micron filter with deionized or distilled water to prepare it for reuse or storage. See Filter Washing Procedure on back page for more information on filter washing.
22. When finished viewing data, or if ready to run the next sample, press ESC to get to the HOME screen and repeat sampling procedure.

**Note:** It is recommended you repeat the above steps 3 times on separate aliquots of the sample. If you see inconsistent results, please refer to the Sample Handling Guidelines in Section 4.2.
Filter Washing Procedure

The 10 micron filters are made from nylon mesh (10 micron mesh size) and are used to filter out greater than 10 micron cells. When the Ballast-Check 2 displays HIGH risk for samples, you will be asked to insert a 10 micron sample. See Measuring a Sample Guidelines, steps 11-14, for instructions on how and when to filter using the 10 micron filters.

We recommend back washing the 10 micron filters after each use to clean any debris or organisms trapped after a filtering event. We also recommend back washing the filters after use, prior to storage, to avoid salt from crystallizing onto the filter. To wash the filters properly:

1. Locate the filter washing kit.
2. Attach the plastic tube included in the filter washing kit to the 5cc plastic syringe.
3. Obtain deionized or distilled water.
4. Fill the 5cc syringe with deionized or distilled water.
5. Attach the other end of the plastic tube to the outflow port of the 10 micron filter holder.
6. Make sure there is nothing attached to the inflow port of the 10 micron filter holder.
7. Push water through the filter to remove any materials trapped on the nylon mesh.
8. Repeat as necessary as determined by visual inspection.

This should effectively clean the 10 micron filter, ensuring all particles or organisms trapped by the filtering event are purged from the nylon mesh.

Viewing Data

Data can be viewed on the Ballast-Check 2’s display using arrow keys. The ESC button should first be pressed to ensure you’re on the Home screen, then:

1. If you wish to view results for a specific sample, toggle to that sample using left and right arrow keys. The sample number is displayed in the bottom right corner of the screen.
2. When the desired sample is displayed use the down key to show the Abundance and Activity values for that sample.

Refer to Ballast-Check 2 manual for instructions on how to send and view data on your computer and how to clear logged data from the Ballast-Check 2’s memory.

If you need assistance, technical specialists are available at 408-749-0994 or toll-free at 877-316-8049.