

# FastBallast Quick Start Guide

## PACKING LIST

A checklist of the equipment provided with the FastBallast CMD is provided in the FastBallast System Handbook, Table 4: The FastBallast Packing List.

## WARNING



Before using the product, you should read the supplied FastBallast System handbook (2473-100-HB), paying particular attention to the safety information and warnings.

## SUPPORT

For technical information and customer support, use the QR code below.



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**1 THE FASTBALLAST INSTRUMENT**

**Error! Reference source not found.** shows the FastBallast instrument with the supplied Galaxy Tab A9 Android Tablet.

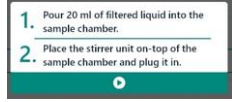


| Item | Description              | Item | Description                     |
|------|--------------------------|------|---------------------------------|
| ①    | Android tablet           | ⑤    | Charging indicator LED          |
| ②    | Illuminated power button | ⑥    | Power in (15 VDC) connector     |
| ③    | USB connector            | ⑦    | Stirrer (in transport location) |
| ④    | Stirrer connector        | ⑧    | Sample chamber                  |

**Figure 1:** The FastBallast instrument.

## 2 RUNNING A TEST

If the FastBallast battery unit is completely discharged, it should be charged for at least 30 minutes before use. The basic steps needed to run a test are outlined in Table 1.

|   | OPERATION                                                                                                                                                         | IMAGE                                                                               |    | OPERATION                                                                                                                                                                                                                                             | IMAGE                                                                                 |
|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1 | Place the <b>FastBallast</b> on a secure level Surface.<br><br>Open the <b>FastBallast</b> lid.                                                                   |    | 2  | Turn on the <b>FastBallast</b> by pressing the <b>Power Button</b> on the top panel until it illuminates.<br><br>Remove the <b>Tablet</b> from the lid.<br><br>The <b>Tablet</b> can be either retained in the lid or hand-held while running a test. |    |
| 3 | Wait a minute before switching-on the <b>Tablet</b> and launching the <b>FBtest</b> application.                                                                  |   | 4  | When the <b>Home</b> screen appears press the test button:<br><br><br><br>to initiate a test run.                                                                  |    |
| 5 | A dialogue box will appear. The ship's IMO Number, Tank ID and Tester Name must be entered before the test can be run.                                            |  | 6  | Remove the <b>Stirrer</b> from the <b>Sample Chamber</b> where it is stored during transit.<br><br>Move the <b>Stirrer</b> collar to the test position by sliding it down the barrel and rotating until it clicks into position.                      |  |
| 7 | Fill a <b>Measuring Cup</b> with sample to the base of the rim grooves (~20 mL).                                                                                  |  | 8  | Put the <b>Stirrer</b> to one side and place the <b>Filter Funnel</b> into the <b>Sample Chamber</b> , as shown. And then pour the sample through the <b>Filter Funnel</b> .                                                                          |  |
| 9 | Remove the <b>Filter Funnel</b> and place the <b>Stirrer</b> in the <b>Sample Chamber</b> , ensuring it is correctly registered (as indicated by the red circle). |  | 10 | Press the <b>Run</b> button in the dialogue box to initiate the measurement sequence.                                                                                                                                                                 |  |

**Table 1:** Basic operating instructions.

## 2.1 RESULT SCREEN



**Figure 2:** Test Overview screen.

| Item | Function                    | Description                                                                                                                                                                                                                                                                               |
|------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ①    | Test Progress Field         | Indicates the test completion percentage.                                                                                                                                                                                                                                                 |
| ②    | Test Progress Bar           | The Progress Bar provides a visual indication the time to test completion.                                                                                                                                                                                                                |
| ③    | Test Status Field           | Describes the current test phase.                                                                                                                                                                                                                                                         |
| ④    | Test Data Box               | Summarises the test data entered at the start of the test.                                                                                                                                                                                                                                |
| ⑤    | FastBallast Information Box | Provides a summary of the connected FastBallast configuration.                                                                                                                                                                                                                            |
| ⑥    | ST Curve Plot               | This window plots the averaged sequence data from the last test point.                                                                                                                                                                                                                    |
| ⑦    | ST Parameter Plot           | This window appears after three test points have been acquired. For the first 120 test points only a running trace of $F_m$ , $F_o$ and $F_v$ are plotted. After this, the window can be toggled sequentially between the ST Parameters and the L2 and L3 distribution histograms (blue). |
| ⑧    | Test Point Data Window      | This window displays the current sequence number and the derived parameters for the last acquisition test point.                                                                                                                                                                          |
| ⑨    | Results Box                 | The results box is updated 4 times during a test. The L1 test results are presented After 120 acquisitions. Results for L2 and L3 analyses are subsequently updated after 240, 360, and 480 acquisitions.                                                                                 |
| ⑩    | Final Results Box           | The final test result is presented in this box after 480 acquisitions.                                                                                                                                                                                                                    |

**Table 2:** The Run Test screens.

## 2.2 AFTER RUNNING A TEST

To prepare for the next test follow the steps listed in Table 3.

| STEP | ACTION                                                                                                                                                                                                              | IMAGE                                                                              |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| 1    | Remove the Stirrer and rinse gently with tap or deionised water then dry it with kitchen towel or equivalent.                                                                                                       |                                                                                    |
| 2    | Empty the sample chamber using the <b>Syringe</b> fitted with a short length (~50 mm) of the silicone tubing supplied.<br><br>Alternatively, a couple of pieces of kitchen towel can be used to soak up the sample. |  |
| 3    | Wash the sample chamber out with tap water or deionised water at least twice, using the <b>Syringe</b> or kitchen towel to empty the chamber each time.                                                             |                                                                                    |
| 4    | Dry the chamber out with a clean piece of kitchen towel.                                                                                                                                                            |                                                                                    |

**Table 3:** Steps to perform after a test is completed.

## 2.3 SHUTTING DOWN

### 2.3.1 Quitting FBtest

To exit the FBtest application:

1. Swipe up from the bottom of the screen to access the Android dock.
2. Select the icon with the 3 vertical lines to display the open applications.
3. Swipe the FBtest window to the top of the screen to exit.

### 2.3.2 Switching off the FastBallast

To switch off the FastBallast, hold down the Power Switch for a few seconds until the illuminated ring flashes green.

The FastBallast will flash once after a few seconds, indicating that it has fully shut down.

**Do not attempt to restart the FastBallast before it has fully shut down.**



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