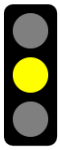
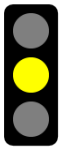
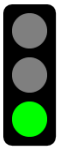
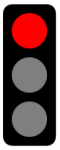
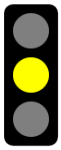
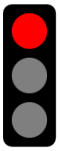
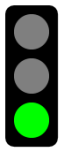
MBW Error Messages

Error Message	Description	Operator Response	
Mean N2 Insp. is out of valid range	Sustained re-inspired N_2 levels above the acceptable threshold of 0.3% (N_2 tracing not returning to zero on inspiration) indicates a small constant leak, typically at Nafion tube connection.	➢ Check Nafion tube connections and integrity to rule out a possible leak. ➢ Also ensure that mask or mouthpiece is fitted properly to minimize episode of leak. ➢ Collect an additional trial. ➢ If error message continues to appear, replace Nafion tube.	
Flow during Insp. is too high	Appears when flow during inspiration exceeds the threshold of 1000 ml/s. The subject breathes beyond the bias flow and inspires N_2 from room air creating a leak in the circuit.	➢ Inspect for leak: O_2 not maintained at 100% during inspiration. ➢ If leak or if unsure collect an additional trial.	
Sample Flow not in defined valid range	Sampling rate at the Nafion tube is too low or too high.	➢ Please contact the manufacturer to ensure proper function of MBW device.	
DSR-SET not attached properly? (TransitTimeError)	Appears when the software senses misalignment of the DSR/Spirette/Flowhead assembly. Misalignment of these components may compromise accuracy of flow and volume measurements and cause the trial to be rejected.	➢ Check equipment set-up and connections. ➢ Collect an additional trial.	
LCI Target not reached – no valid results.	Often triggered by a software error has selected an incorrect breath as the last valid breath of washout (2.5% [N_2] target).	➢ Verify there are three consecutive breaths where N_2 Cet norm is below 2.5%. If so, end of test criteria has been met. ➢ The incorrect last valid breath can be changed manually by over-reading centre.	
O2 calibration not done	Appears when the channel calibration is not performed prior to testing, or the results were not saved.	➢ Perform channel calibration. ➢ Make sure to press 'save'.	
St. Dev. CO2Cet is out of valid range	Indicates variable end-tidal CO_2 levels	➢ Continue to distract/coach and encourage subject to breathe naturally.	
CV% of LCI/FRC is too high.	Currently not rejecting or accepting trials based only on CV % of LCI or FRC. The software flags variable results. Generally, repeatable measurements are encouraging.	➢ Typically, an extreme (>1 unit) outlier indicates a leak or significant difference in breathing pattern between trials. ➢ When error message appears, inspect existing trials and collect an additional trial if possible.	