



Vitalograph AIM

Aerosol Inhalation Monitor

Description of the device

The device (Aerosol Inhalation Monitor) is designed to enable a medical professional to objectively assess in detail how the test subject uses an inhaler. This detailed knowledge allows the medical professional to assess and coach the test subject in perfecting their inhalation technique.

Main Components of the Device:

1. Single-use disposable DPI inhaler simulator
2. Single-use disposable MDI inhaler simulator (also required for spacer)
3. Silicone tubing
4. Power button
5. DPI simulator button
6. MDI simulator button
7. Spacer simulator button
8. Ready to inhale
9. Flow lights
10. Canister activation (MDI)
11. Inhalation time lights
12. Breath-hold lights
13. End of breath-hold button
14. Battery low light
15. MDI placebo canister (re-use until empty)
16. Inhaler technique summary display

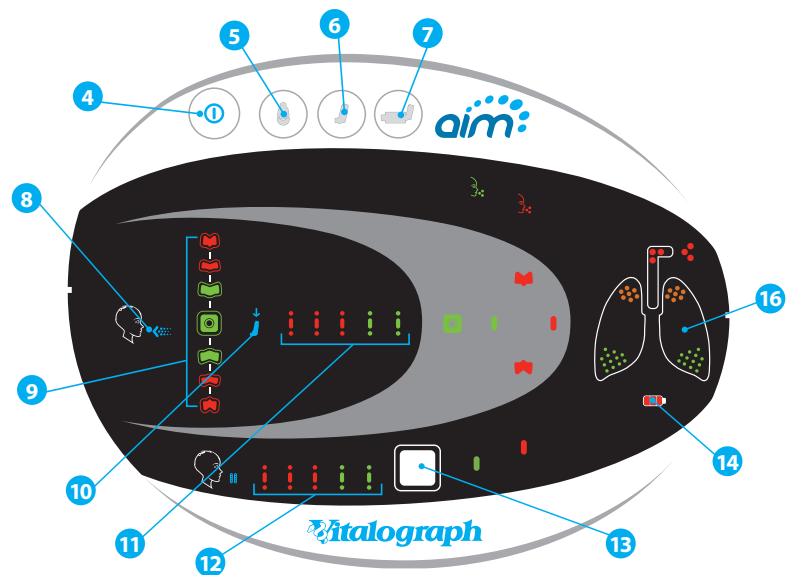


Image No. 2

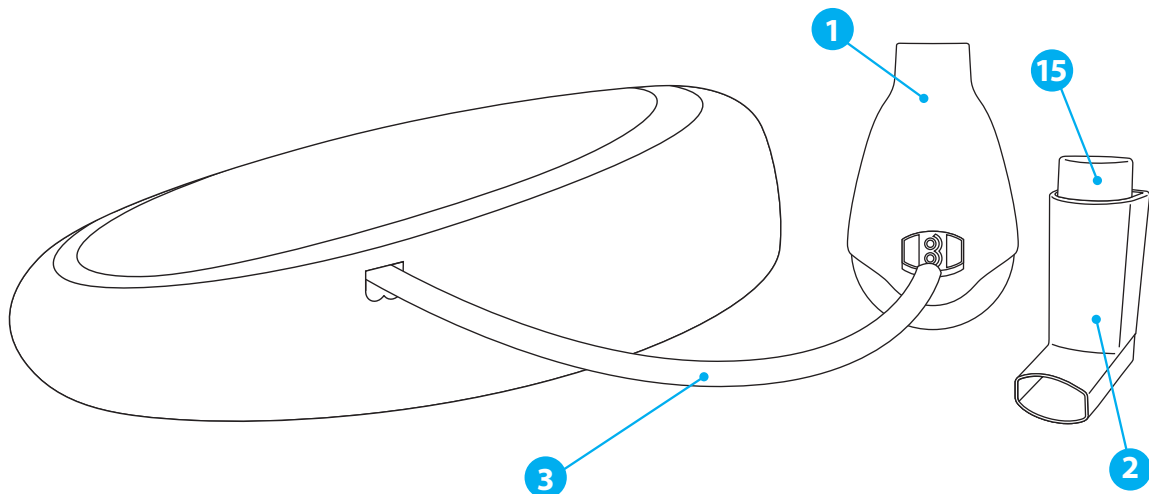


Image No. 1

Operating the Device

1. Connect a new inhaler simulator (1 or 2) to the device via the silicone tubing (3). The inhaler simulators are single use disposable. For MDI fit placebo canister.
2. Press the power button (4) and select the inhaler simulator option DPI simulator (5), MDI Simulator (6) or Spacer trainer simulator (7).
3. For all devices, instruct the test subject to breathe out fully. *Not through the inhaler simulator.*
4. Instruct the subject to position the inhaler simulator between the lips sealed around the mouthpiece.
Note: Ensure that the holes adjacent to the tubing connection to the inhaler simulator are not obstructed.
 - a. **DPI Simulator:** Instruct the test subject to take a forceful deep breath in until their lungs are full. The flow lights (9) will light up. The aim is to get the flow indicator into the green zone as quickly as possible, but not to inhale too fast. The test subject should continue to inhale until their lungs are full. The inhalation time lights (11) will light up one second at a time.
 - b. **MDI Simulator:** Instruct the test subject to take a slow deep breath and simultaneously press the canister. The flow lights (9) and the canister activation lights (10) will light up. The aim is to press the canister as the test subject starts to inhale, and to continue to inhale for as long as possible, but not too fast. The test subject should continue to inhale until their lungs are full (at least 3 seconds). The inhalation time lights (11) will light up one second at a time.
 - c. **Spacer Simulator:** Instruct the subject to press the canister just before or as inhaling starts. The canister activation light (10) will light up. The Spacer Simulator allows the subject to take a single or multiple breaths. The test subject should continue until at least 3 seconds inhalation is achieved.
5. For all devices the subject should hold their breath for as long as comfortable (at least 3 seconds). The breath-hold lights (12) will light up one second at a time.
6. When the subject ceases breath hold, press the end of test breath-hold button (13).
7. The individual result lights (Image 3) and Technique Good/Poor Summary (Image 4 - 6) will then appear.
8. To repeat, press the appropriate inhaler simulator option button.

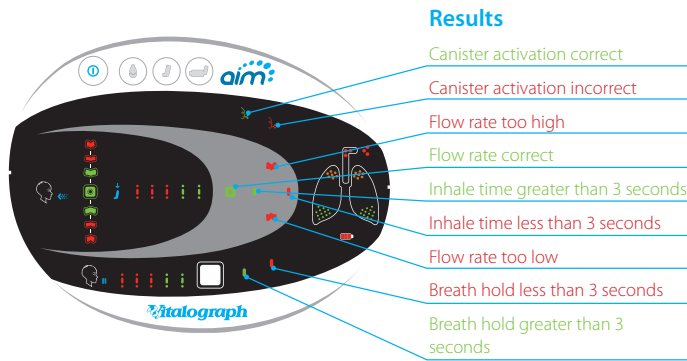


Image No. 3

Cleaning Instructions

A new disposable inhaler should be used for each subject. The exterior case, overlay label and white silicone tube can be cleaned by wiping with a 70% isopropyl alcohol impregnated cloth. This provides a suitable form of cleaning and low-level disinfection. This may be preceded by cleaning with an anti-static foam cleaner if necessary. The device is not designed as a 'sterile' device.
Note: Always follow the safety guidelines given by the manufacturer of cleaning and disinfectant chemicals.

Change of Batteries

If the battery light (14) comes on the batteries need to be replaced. Replace the 4 'AAA' type disposable batteries by removing the battery door on the underside of the device. Dispose of used batteries safely.

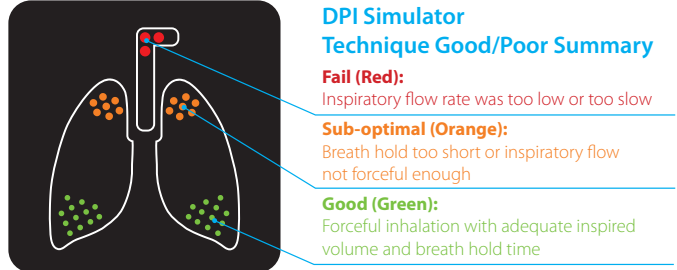


Image No. 4

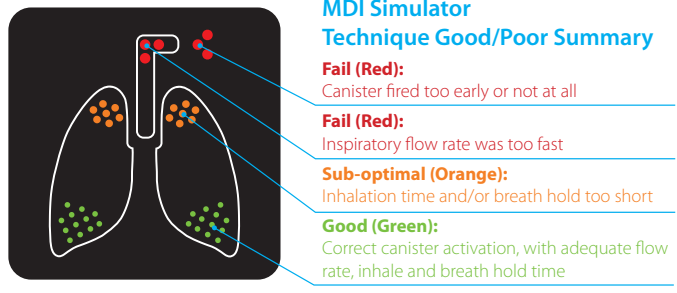


Image No. 5

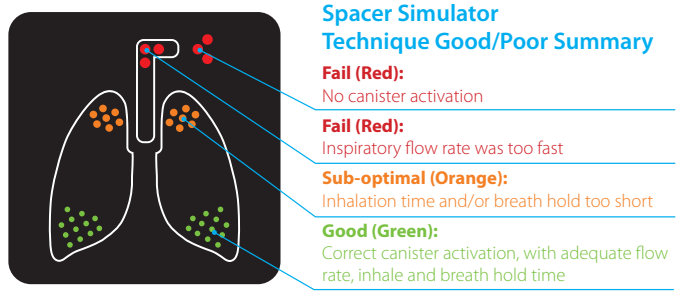


Image No. 6