Using this guide it will take you just a few minutes to produce your first spirometry test results using the Vitalograph Alpha Touch. If you need further instruction details, you will find the User Manual on the CD provided. If you need more help visit Technical Support on: www.vitalograph.co.uk.
ALPHA Touch buttons and connections

1. Vitalograph ALPHA™ Touch device
2. Print roll under cover (remove packing)
3. Fleisch flowhead
4. Silicone twin-tubing
5. PowerSAFE™
6. Sample BVF™ mouthpieces (shown) and SafeTway® mouthpieces and Noseclips (not shown)
7. User Instructions sheet (not shown)
8. Resource CD
9. Vitalograph Reports CD (not shown)
10. USB Cable
11. Your PC

Using ALPHA Touch with optional PC software

Mode 1: Use with Spirotrac® PC Software

1. If you plan to use your Vitalograph ALPHA Touch with Spirotrac PC software then first install the software on your PC. You need Administrator rights to do this, if unsure consult your IT administrator.
2. Ask the administrator to set you up as a ‘Site Administrator’ user on Spirotrac with your own password. (There are also ‘Operator’ users if there will be several users on the same PC).
3. If you want to import a list of your test subjects (recommended) from another application, get your IT administrator to help with this. Spirotrac has tools to enable this facility, which saves you having to enter each new spirometry test subject.
4. When you have Spirotrac populated with subjects, connect the ALPHA Touch to your PC. After a few moments all the subjects will automatically be transferred from Spirotrac to the ALPHA Touch device. If you have thousands of subjects this may take some time on first connection.
5. In Spirotrac set the device type – Tools/ Device/ ALPHA Touch. There is a ‘test connection’ facility.
6. When you perform a test with the ALPHA Touch, the test data is automatically transferred to Spirotrac. You can also create reports of every new test session at this time.

Mode 2: Use in Remote Mode

1. Spirotrac users can use the ALPHA Touch as a ‘dumb flowhead’ to conduct real-time testing on the PC software. When used in this mode (by selecting ALPHA Touch as the device in Spirotrac) test results are not stored in the ALPHA Touch.

Mode 3: Using with Vitalograph Reports Software

1. You can generate PDF spirometry reports at the end of each test session by connecting to Vitalograph Reports PC software. You can name and file the PDF files as you choose, or print for a hard copy report.
Performing a test session

It is highly recommended to test yourself on any new device before using with a real subject.

1. Press the "On" switch at the back of the device. After several seconds, the display will look something like Image 1.

2. Select a subject from the list and confirm that this is the correct test subject. (Alternatively select the ‘new’ tab and enter a new subject)

3. Fit a disposable BVF or SafeTway mouthpiece. The use of a disposable noseclip is also recommended. Give the following instructions to the subject so that testing is performed properly: Using a mouthpiece, it is advisable to perform an animated demonstration of the test technique to the subject prior to them performing the test.

4. Now press ‘Enter’ to go directly to VC test. The display will look like Image 2 after 3 blows.

5. It is only possible to perform a test when the blow icon (eba) appears. Always watch for this to be displayed. It will be accompanied by two beeps.

6. Now select the FVC tab to go directly to the FVC test. The display will look like Image 3 after 3 blows.

VC Test
- Sit upright, fit the noseclip and relax
- Hold the flowhead, keeping it away from your mouth
- Inhale as deeply as possible, hold your breath, then insert the mouthpiece carefully into your mouth, not like a trumpet, but clamping it gently between your teeth
- Seal your lips round the mouthpiece and keep your tongue down
- Blow out as long as possible. Keep blowing until all the air is expelled. It is vital that the operator encourages the subject to keep blowing to ensure all air is squeezed out
- Listen for two beeps. This indicates that the ALPHA Touch is ready for the next blow. Repeat the blow three times or more to obtain good test quality

FVC Test
- Sit upright, fit the noseclip and relax
- Hold the flowhead keeping it away from your mouth
- Inhale as deeply as possible, hold your breath, then insert the mouthpiece carefully into your mouth, not like a trumpet, but clamping it gently between your teeth
- Seal your lips round the mouthpiece and keep your tongue down
- Blow out as fast and as long as possible. Keep blowing for at least 6 seconds. (From the very beginning of the blow the operator should encourage the subject to keep going in a lively fashion. Keep eye contact with the subject)
- Listen for two beeps. This indicates that the ALPHA Touch is ready for the next blow. Repeat the blow three times or more to obtain good test quality
Producing a report on the integral printer

Simply select the Report Icon.

The internal printer will start to print your spirometry report. Tear it off when it has finished printing.

CONGRATULATIONS! YOU HAVE SUCCESSFULLY COMPLETED YOUR FIRST SPIROMETRY REPORT ON YOUR VITALOGRAPH ALPHA TOUCH.

Test Quality

A usable FVC is a blow with a good start of test (not hesitant) and is without artefact (e.g. cough).

An acceptable FVC is a usable blow with a good end of test (expiratory plateau) and also be of sufficient duration (for adults, greater than 6 seconds).

The test grade reported depends on the number of acceptable/ usable blows and the repeatability of these blows in the test session:

\[ F = \text{No usable blows (By convention there is no E grade)} \]
\[ D = \text{Only one usable blow} \]
\[ C = \text{At least 2 usable blows, with highest 2 usable FEV}_{1} \text{ values >150ml} \]
\[ B = \text{At least 3 usable blows, with highest 2 usable FEV}_{1} \text{ within 150ml} \]
\[ A = \text{At least 3 acceptable blows, with highest 2 acceptable FEV}_{1} \text{ value within 150ml AND highest 2 acceptable FVC values (or FEV}_{6} \text{ values) within 150ml} \]