



New features in Tafonius software version 1177

Version 1177 replaces version 1174.

Version 1174 was introduced in October 2016.

Version 1177 was introduced in October 2018.

These are the new features in version 1177:

Major changes

Display Pressure/Volume loops

Display Flow/Volume loops

Easier implementation for running user-designed ventilation patterns or Phases.

Improved implementation of Phases

Improved positioning of traces when organising the user-screen

Support for printing to a dedicated ECG thermal printer

The last 5 minutes of ECG data is held for viewing in the Trend Viewer and can be printed

The slider for ECG/IBP position and for Filter setting has been replaced with easier to use UP/DOWN arrows

The trace thickness for the displays can be changed. Thicknesses of 1, 2 or 3 pixels can be selected.

Minor changes

- The thermometer display has been replaced with two numeric displays showing T1 and T2, for improved readability.
- Body weights can now be entered in kgs or lbs and the conversion is automatic. The Anaesthetic Record now uses these units for the report.
- Age can now be entered as a DOB or an age and the conversion is automatic.
- An option has been added to support a third gas in the automatic mixing routines (FiO2 control) - advanced feature for research purposes. Please contact us for further information.

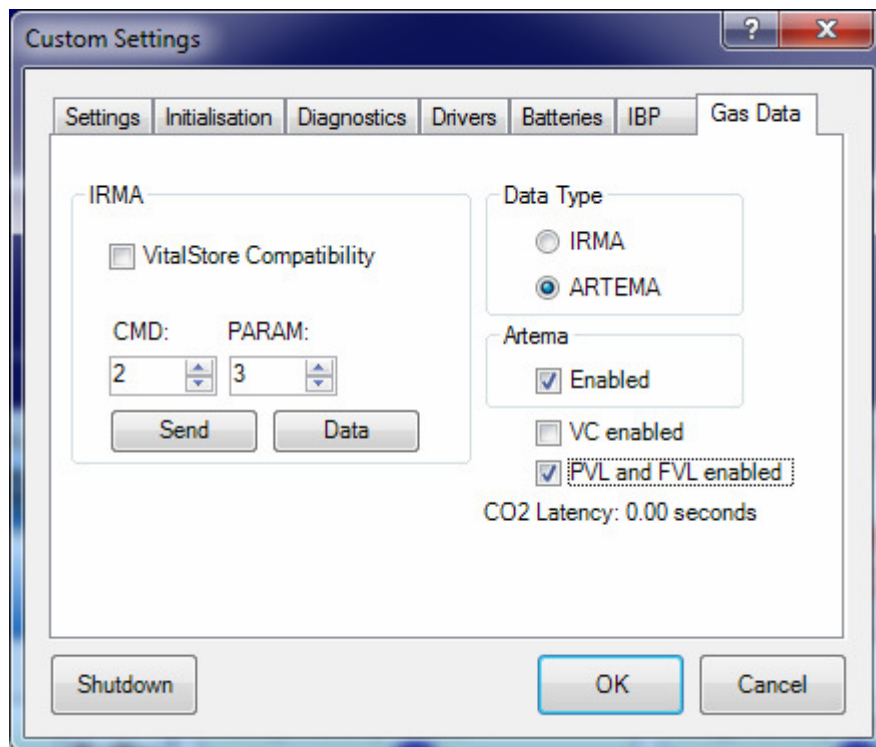


Using the new features

Displaying Pressure/Volume and Flow/Volume loops

This feature needs to be enabled in a control dialog box before you can add these loops to your screen.

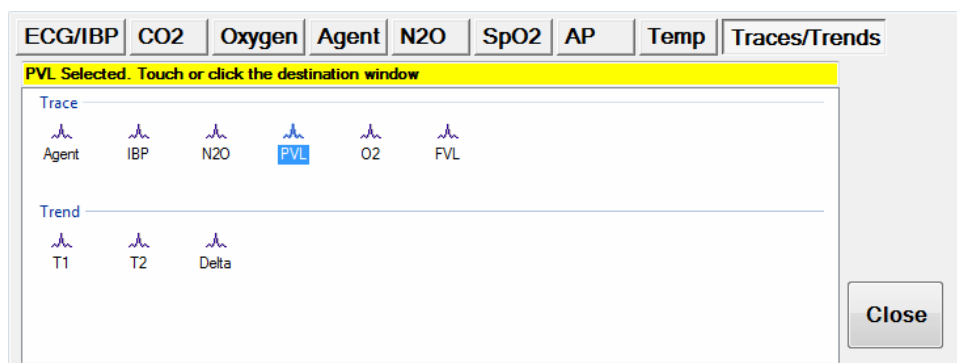
With the normal Tafonius screen showing (and no Attribute boxes open) press alt-z to bring up a dialog box:



Select the Gas Data tab and make sure that the PVL and FVL enabled box is ticked.

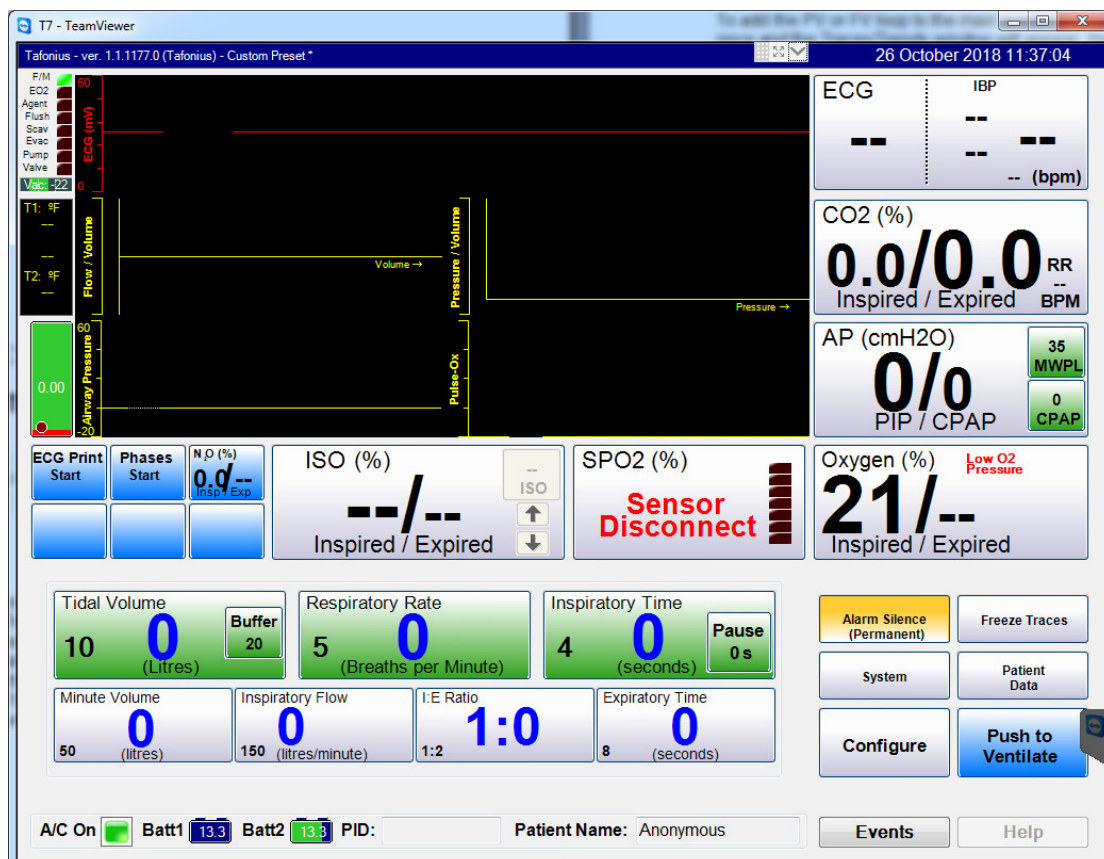
Click OK to close the dialog box.

To add the PV or FV loop to the main screen touch any trace on the screen once and the Traces/Trends window will appear. Here the CO2 trace has been touched.





We do not want to move the CO2 trace, so touch the CO2 trace again to leave it where it is. The Traces/Trends window will remain. Now touch the PVL icon which will become highlighted. Then touch the position on the screen where you want the trace to appear. The PVL trace will be inserted. In the screen below the FVL and PVL traces have been placed next to each other in the centre of the screen. These traces use the same colour selections as the Airway Pressure.



Using Phases

The selection of Phase files and the Stop/Start implementation has been changed.

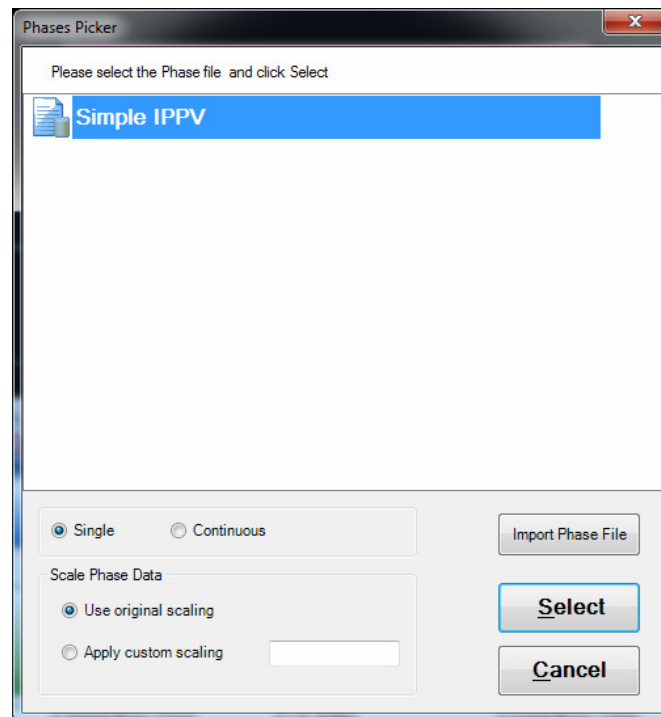
To use a pre-designed Phase, touch the small blue **Phases Start** button. A dialog box appears that allows you to either select a file that has already been imported or to import a new one. If your new Phase file isn't listed, use the Import Phase File button to locate your file and import it into the software. This will typically be from a USB stick.

Once a file has been imported it will appear on the list and can be selected. Before touching Select, decide whether you want to run this Phase file once or continuously. Select either the Single or Continuous radio button. When



Single is selected, the Phase file will run from beginning to end and then stop and the machine will return to normal mode.

When continuous is selected the machine will run the Phase file through to the end at which point it will immediately start running the phase file again.



Scaling can be used and applies only to volume parameters. If a scaling value of 0.5 is entered then all volume values in the original Phase File will be implemented at 50% of their original value.

When a Phase file is successfully loaded the blue ventilate button changes to show Push to Run Phases. When running Phases, the button is pressed to return to Standby in the normal way. To cancel running phases, touch the Phases Stop button



Improved implementation of Phases

When running phases, if a normal violation occurs such as a MWPL pressure exceeded violation, then that single phase is automatically terminated and the program moves to the next phase in the file.



Improved positioning of traces when organising the user-screen

When traces are dragged and dropped onto the screen their resting position is now in line with where they are dropped. In previous versions traces could only be placed to the left of existing traces.

Support for printing to a dedicated ECG thermal printer

Machines can be fitted with a thermal printer for printing real-time ECG traces. This is an optional extra.

At the time of writing this document the trace quality of the ECG was unsatisfactory at higher print speeds and the option has been temporarily withdrawn until this can be rectified.

The last 5 minutes of ECG data is held for viewing in the Trend Viewer

The Trend viewer is accessed by touching the Patient Data button in the group of Setup buttons at the bottom right of the screen. Select the View Trends tab and then in the drop down tab, select ECG History. This will show the last 5 minutes of ECG data and can be scrolled through and inspected. Full information on this new feature can be found in the document " **Using the new ECG Print feature in Tefonius Full machines**"

The slider for ECG/IBP position and for Filter setting has been replaced with easier to use UP/DOWN arrows

When selecting the ECG or IBP attribute box, a new control of the traces is shown on the right-hand side.

The screenshot shows a control panel for ECG/IBP monitoring. At the top are tabs for ECG/IBP, CO2, Oxygen, Agent, N2O, SpO2, AP, Temp, and Traces/Trends. The ECG/IBP tab is active. On the left, there are buttons for Trace, Alarms, and Colours. Below these is a 'Select' section with radio buttons for ECG (selected) and IBP, and a checked 'Synchronise' checkbox. The main area contains several settings: 'Sweep' with radio buttons for 12.5, 25, 50, 100, and 200 mm/sec; 'Sensitivity' with radio buttons for 1, 2.5, 5, 10, 25, and 50 mV; 'Shift' with up/down arrows and a value of 0; 'Filter' with radio buttons for None (selected), Lowpass, and Notch; 'Sound' with a checked 'Beep On ECG' checkbox; and a 'Prevent Double Count' checkbox with a value of 600 and a 'Refractory time (ms)' label. A 'Close' button is at the bottom right.

Here the ECG attribute box is shown.

Use the radio button selector to select whether to shift the ECG trace or to apply a filter. The selected type is shown in blue in between the two arrows. Here, shift is selected. Use the Up/DOWN arrows to change the value of the feature selected. The values are shown in the edit boxes.



The trace thickness for the displays can be changed. Thicknesses of 1, 2 or 3 pixels can be selected.

When changing any trace colour, there is an additional option to change the line size. Values of 1, 2 or 3 pixels are supported.

Please note that the line thickness selection is general and cannot be applied to individual traces.

END