A Quick Guide to Running APLS Scenarios Using ALSi
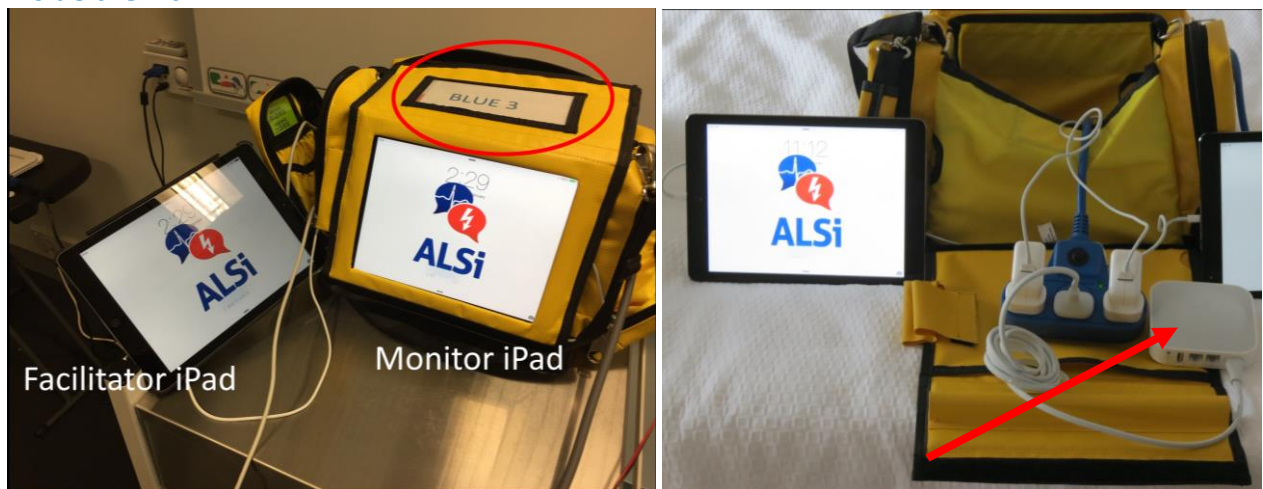
The Kit

Each ALSi unit has two iPads:

- A Monitor iPad that stays in its sleeve at the front of a kit to simulate a monitor screen
- A Facilitator iPad that you take out and use to control the monitor iPad during the scenario

The Facilitator & Monitor iPads have different ALSi software so that they **ARE NOT INTERCHANGEABLE!**

Each kit has a specific name (here it is Blue 3). The two iPads are specific to that kit and are linked by that kit's wireless which is generated by the Apple Airport Express inside the kit – see below.

Inside the kit:

The square, white device is the Apple Airport Express that generates that kit's wifi.

There is a blue, 3 plug power board. The 2 iPads and the Airport Express should be plugged into the power board with the green light on indicating the mains power is connected. **These plug connections are often a bit loose so ensure that they are plugged in properly.**

The Airport Express generates a lot of heat inside the kit so it is usually turned off at the end of the day. While the iPads will run on battery (until they go flat – so keep them charged between sessions), the Airport Express needs mains power to work. If it has been disconnected and you plug it back in, there will be a short delay before the Wi-Fi has been generated so that the 2 iPads can connect. Just be patient!

The Monitor iPad is setup to look like a monitor & defibrillator

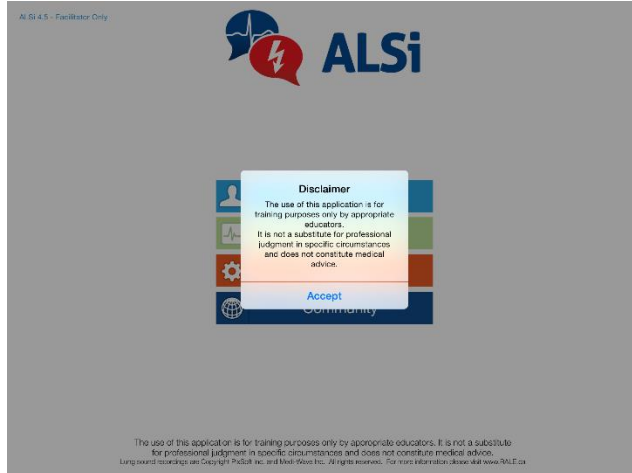The kit comes with ECG / Defibrillator pads, BP cuff and oximeter probe:

To start a scenario

Ensure that the kit is plugged into power and all connections are plugged in correctly.
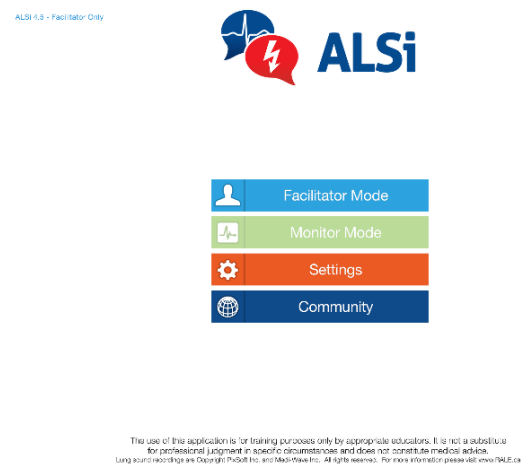Turn on both IPads.

Facilitator iPad

Find the "ALSi Facilitator" icon in the right lower corner of the screen and touch it.
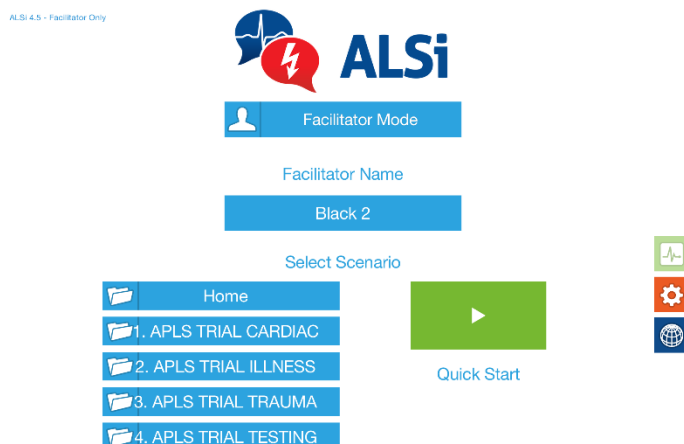

Accept the Disclaimer (it comes up every time).   Touch Facilitator Mode:

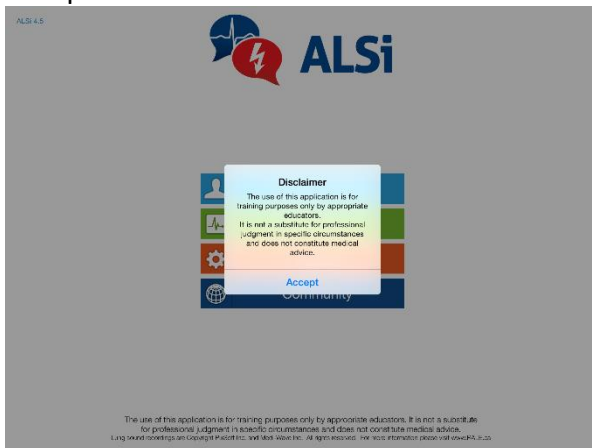The ALSi screen opens with the specific name of the kit (here it is Black 2).

Now look at the Monitor iPad:

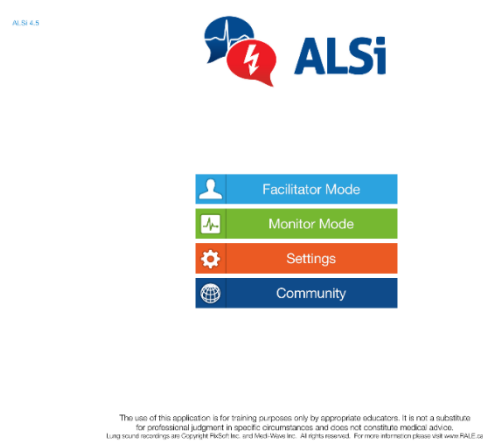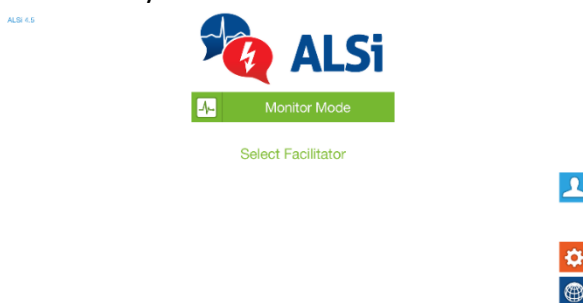Select the ALSi icon (note that the monitor iPad icon just says "ALSi")

Accept the disclaimer   Touch Monitor Mode:

And it asks you to "Select Facilitator"

Now turn back to the Facilitator iPad:

Facilitator iPad

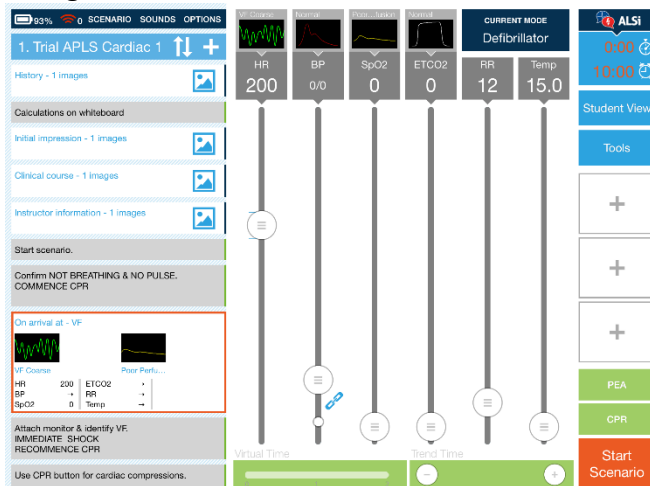

Select "1. APLS TRIAL CARDIAC"
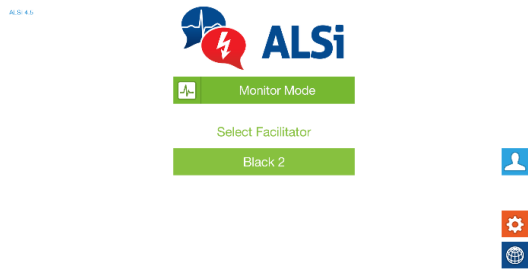Active folders are highlighted in orange.

Select "1. Trial APLS Cardiac 1" to select Cardiac Scenario 1.

The Facilitator control screen opens with the "Start Scenario" in the bottom right corner flashing orange.

Now on the Monitor iPad you will see:
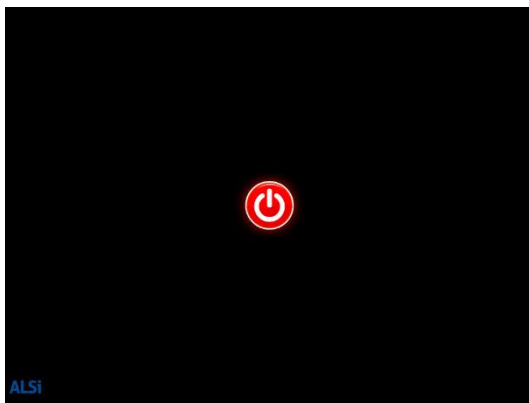
Select "Black 2"   and the ALSi prepared screen opens:
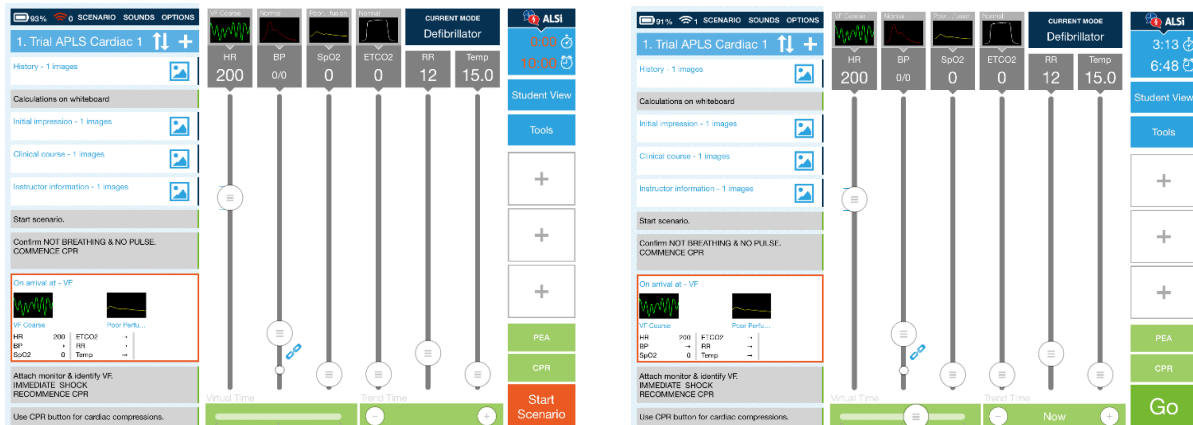

When you touch the "Start Scenario" button on the Facilitator iPad, the Monitor iPad changes to a red & white "On" button. When the scenario moves to the point of interacting with the monitor and manikin, the candidate has to touch this button to start the Monitor iPad in the simulated monitor mode.

Back to the Facilitator iPad

To start the scenario touch the "Start Scenario" button. The "Start Scenario" button changes to a "Go" button which can be used to make changes on the fly – see below.
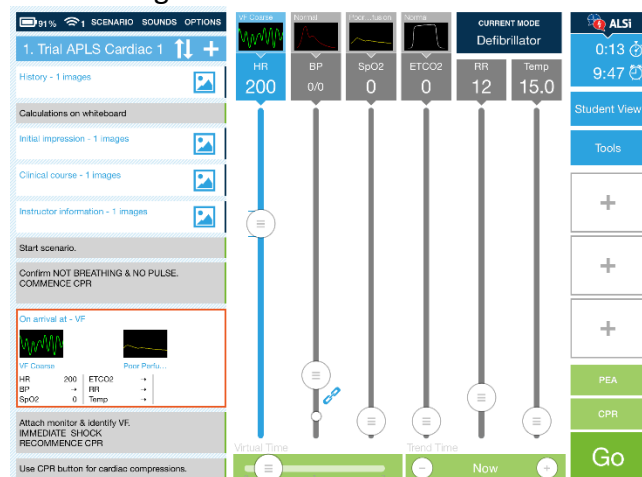

All the parameters (HR, BP, SpO2, ETCO2 etc.) are in grey boxes which mean that they cannot be seen on the Monitor iPad.
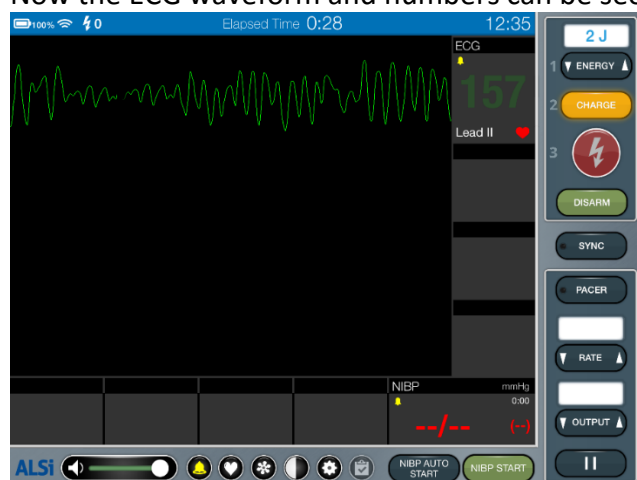
Initial monitor screen

This is because the candidate may not apply all the monitoring e.g. they might put on an oximeter probe but not ECG leads. As they apply the monitoring leads, the instructor touches the appropriate parameter box which changes to blue and can be seen on the monitor iPad.

For example in "Cardiac Scenario 1" when the candidate applies the ECG pads, click on the HR box and it changes to blue

Now the ECG waveform and numbers can be seen on the Monitor iPad.

This is the same for all the parameters above that you may choose to hide or show on the monitor iPad.
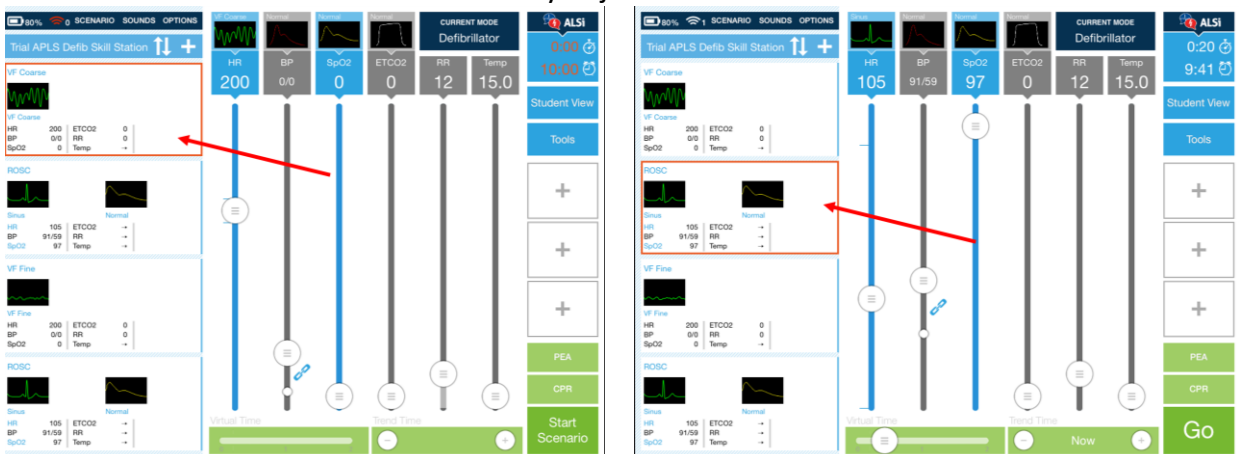
Running a scenario using Quick Picks

ALSi can be run using Quick Picks in pre-set scenarios or running it "on the fly" by bringing in waveforms and making changes in response to the candidate's actions. Any Quick Pick scenario can also be changed "on the fly" if desired.
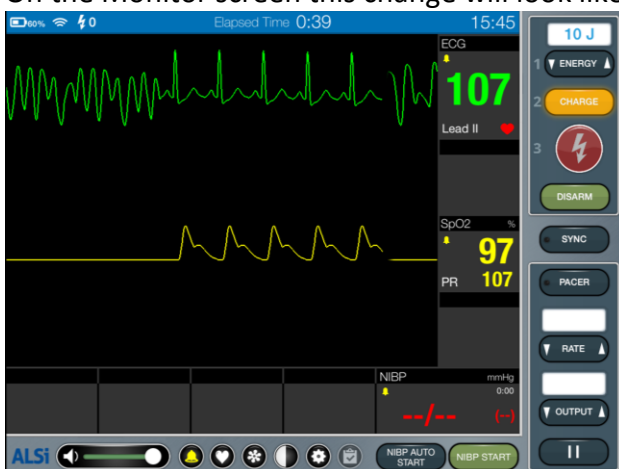
The Quick Picks are the boxes down the left hand side of the screen. An active Quick Pick is highlighted by an orange border.

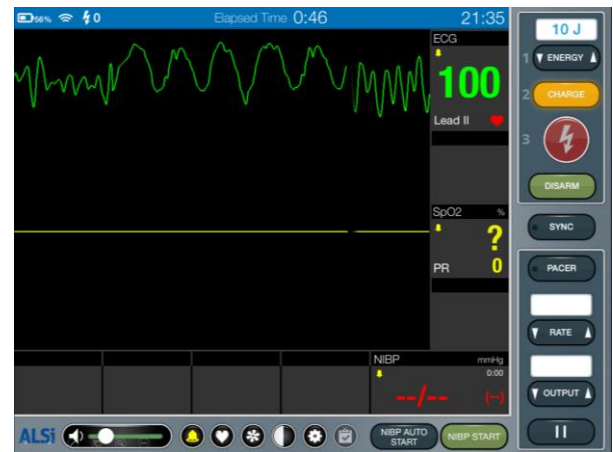To move from one Quick Pick to another you just have to touch the new Quick Pick box.
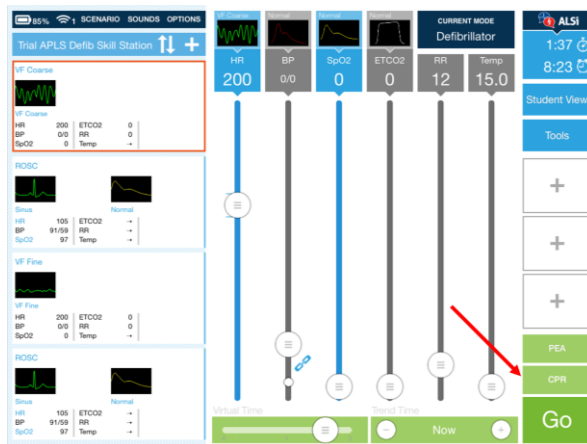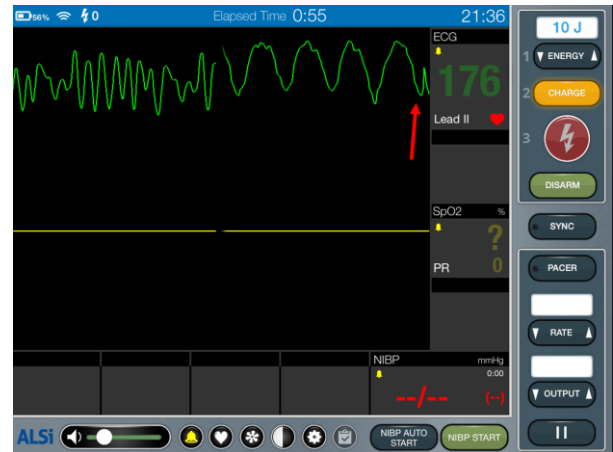

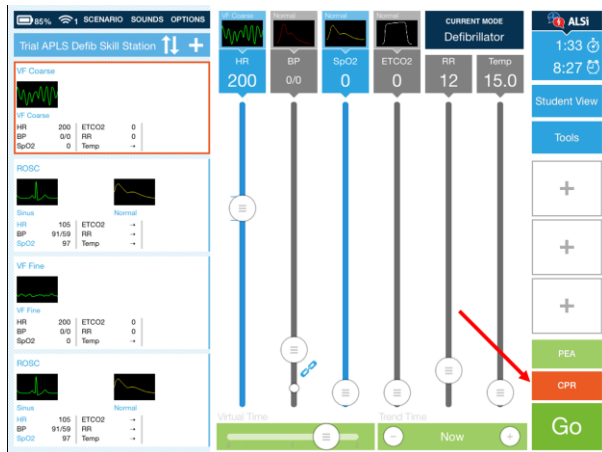On the Monitor screen this change will look like this:

No other buttons need to be pushed.

The CPR button

Touching the CPR button generates a chest compressions artefact (at a 100 beats per minute) on the Monitor screen that masks the underlying rhythm. The CPR button flashes orange when on.

Touching the CPR button again turns it off and removes the artefact so that the underlying rhythm can be seen:

The PEA button (sitting above the CPR button)

Touching the PEA button will override the other parameters (the ECG waveform continues of course).

But note any NIBP numbers on the screen from the last reading will remain on the screen until a new NIBP is performed.

Touching the PEA button again WILL NOT TURN IT OFF!
To turn it off you have to touch an appropriate Quick Pick.

Trending & Jumping in Quick Picks

Quick Picks can be written so that the jump to the next Quick Pick after a set period of time.

A Trend time over which parameters change can also be written into the Quick Pick.

(Also see below in Trending a new set of parameters)

Running a scenario "on the fly"

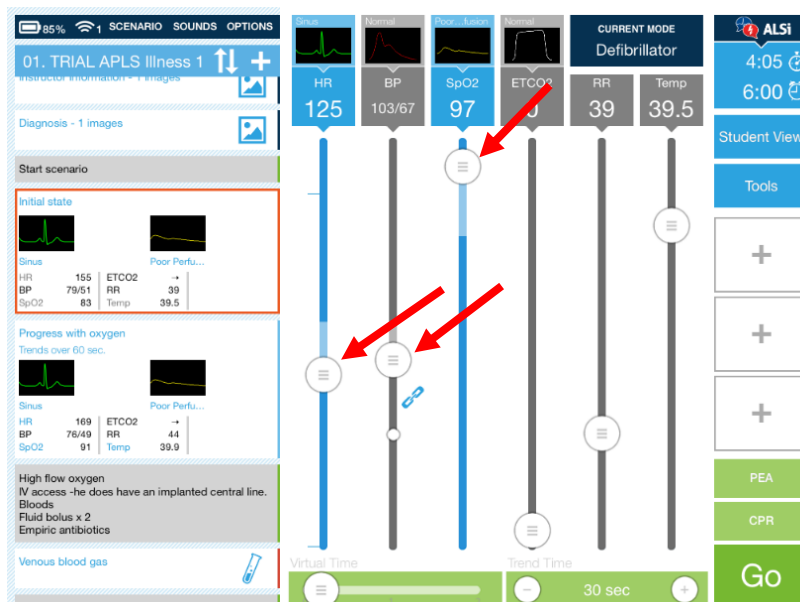Changes on the fly require pressing *Go* to activate the changes.

Changing ECG & other parameter waveforms

Tap on the waveform picture at the top of the screen. This opens a drop down menu of waveforms Click on the one you want to change to.

Changing parameter values

The values of parameters (HR,BP SaO2 etc.) can be changed using the Parameter Value Sliders. Followed by touching the "Go" button.
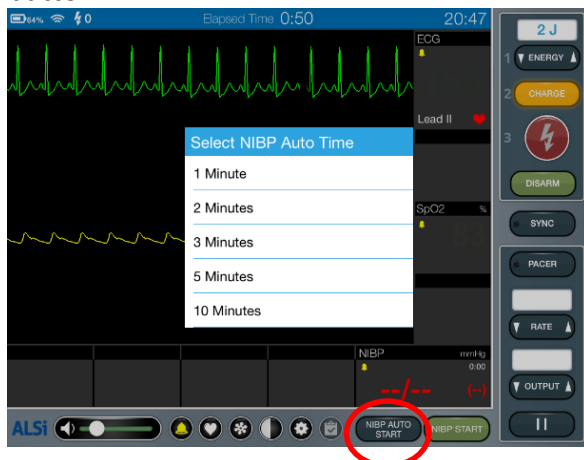
Blood Pressure

The ALSi BP default modality is an invasive BP with waveform. Currently APLS does not use invasive BPs in any of the scenarios. Therefore the waveform should be tuned off (i.e. the box for BP should be grey and not blue). **BUT…** the values for the NIBP are set by the BP parameter sliders even when the BP waveform is turned off.

Systolic & diastolic pressures are linked by default but can be separated to move independently of each other by touching on the chain icon. When unlinked the chain icon is broken and the diastolic slider becomes a larger circle the same size as the systolic slider.

NOTE: without an invasive BP activated, the change won't be seen until the next time the NIBP is taken.

Candidates can choose to set the NIBP to cycle automatically by touching the NIBP Auto Start button:

Or instructors can send a new NIBP directly to the monitor screen using the sequence: 1.Change parameter 2.Go 3.Tools & 4.Start NIBP buttons – **in that order:**

This will immediately start a new NIBP on the monitor screen

Trending a new set of parameters

As discussed above, the values of all the parameters (HR,BP SaO2 etc.) can be changed using the Parameter Value Sliders, followed by touching the "Go" button. This causes the parameter to change immediately.

Alternatively and more realistically, the time over which changes will occur can be set using "Trend Time". This can be set from 10 seconds to 15 minutes using the "+" and "-" buttons.

The parameter line colour will change to a lighter shade for the distance between the current parameters and the new ones. Once the Go button has been clicked, the lighter shade will turn yellow and the trending will start. The yellow part of the parameter line will change to grey as an indicator of the progress of the trend.

The trend time can be lengthened or shortened by increasing or decreasing the "Virtual Time" slider.

How to stop or get out of a scenario

You can pause, reset or exit a scenario by touching "Scenario" which will open the scenario menu:

Touch on the option you want.

If you choose to exit the scenario and you have made changes to parameters, you will be asked if you wish to save the changes. If you touch "Yes", you will be asked to rename your saved scenario: