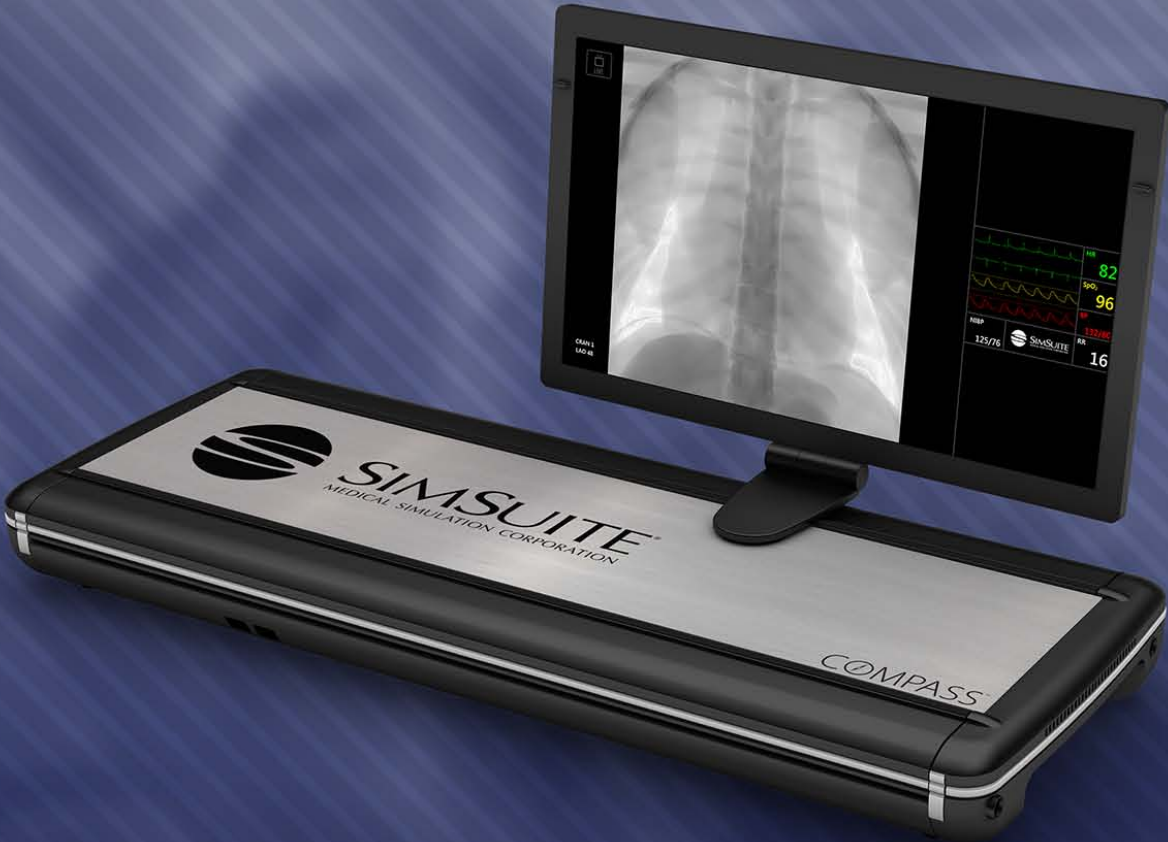


COMPASS™ OPERATIONS MANUAL



SIMSUITE®
MEDICAL SIMULATION CORPORATION

Chapter 1: What’s in the Case4

- Compass Details5

 - Compass Front5
 - Compass Rear5
 - Power Side6
 - Device Side6

Chapter 2: Initial Setup.....7

- 2.1 Unpacking Compass..... 7
- 2.2 Connecting an iPad® to your Compass 7
- 2.3 Changing the Wi-Fi Password 8
- 2.4 Changing the Name of Your Compass 8

Chapter 3: The Basics.....9

- 3.1 Unpacking Compass..... 9
- 3.2 Flows and Modules 9
- 3.3 Starting a Simulation Module.....10
- 3.4 Using a Simulation Module 10

 - Clinical Overview..... 10
 - Equipment 10
 - Angio 11
 - Patient Presentation 12
 - Next Button 12
 - C-Arm 12
 - Contrast Buttons 14
 - Actions Menu..... 14

- 3.5 Packing up Compass 16

Chapter 4: Some Details 17

- 4.1 Action Menu 17

- Install/Update..... 17
- Settings 18
 - About..... 18
 - Notifications..... 18
 - Wi-Fi 18
 - Event Log 18
 - Weekly CIM Maintenance..... 19
 - CIM Recalibration 19
 - New CIM Calibration 19
- 4.2 Accessories..... 19
 - Foot Pedal..... 19
 - Contrast Syringe 20
 - Endoflator 20
- 4.3 External Monitor20
- 4.4 Documentation21
- Chapter 5: Tips on a Successful Training..... 22**
- Chapter 6: Service and Support 24**
- Chapter 7: Specifications..... 25**
 - 7.1 Technical Specs25
 - General..... 25
 - Operating Environment..... 25
 - Power..... 25
 - 7.2 Warnings/Labels25
 - FCC Declaration of Conformance..... 25
 - CIM Modules and Electrostatic Discharge..... 26
 - 7.3 Additional Regulatory Information.....26
 - 7.4 Legal Information29

Chapter 1: What's in the Case



Compass™ simulator



Power cord



iPad®



iPad charger



Foot pedal



Parts kit
(alcohol swabs and spare trackball)



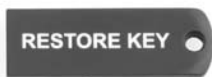
Introducers
(1 or 2, depending on Compass model)

Varies depending on your Compass configuration. See your courseware manual for pictures.

Calibration tools



Static wrist guard



System restore drive



Backup connection cable



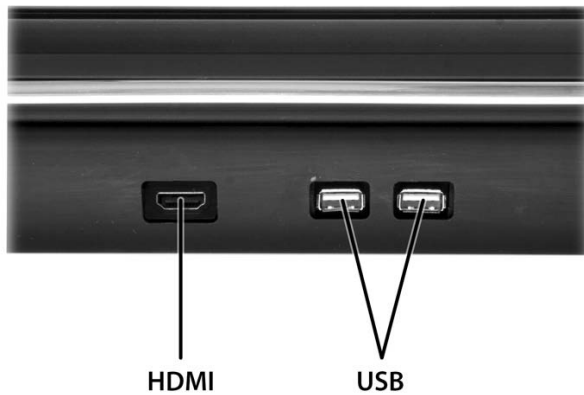
Compass case

Compass Details

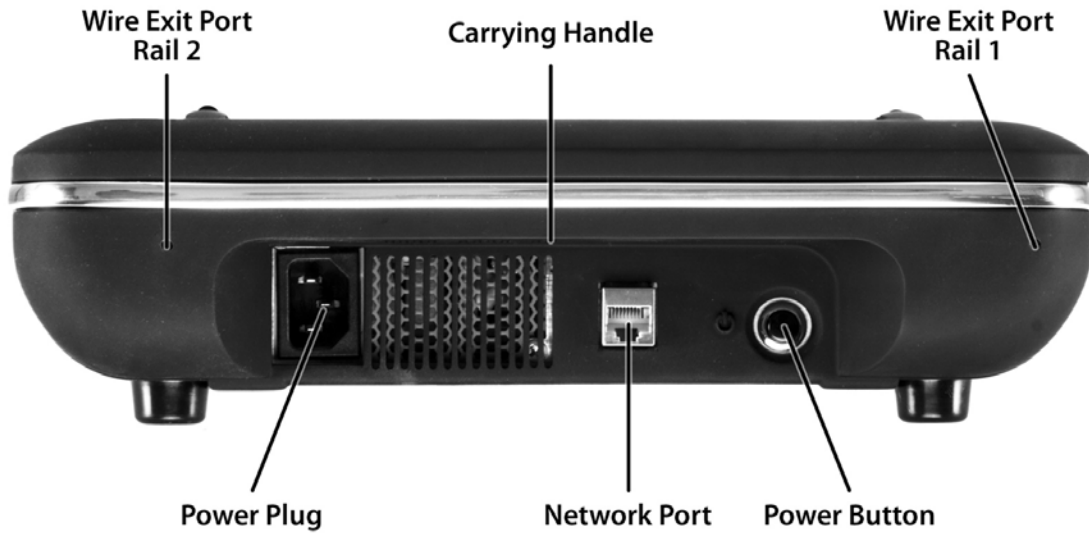
Compass Front



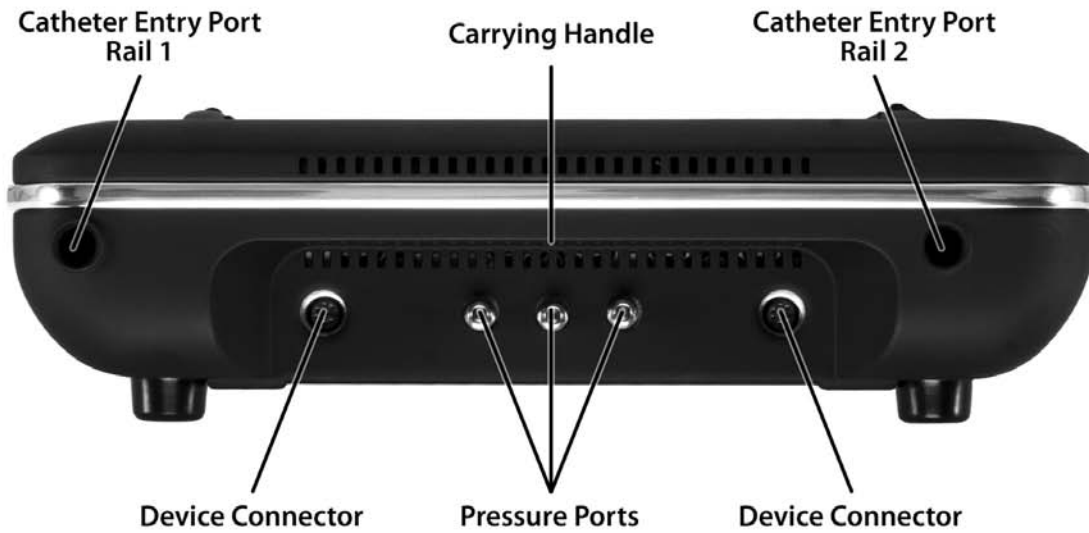
Compass Rear



Power Side



Device Side



Note: Never inject liquids into the Compass pressure ports. This could permanently damage your Compass simulator!

Chapter 2: Initial Setup

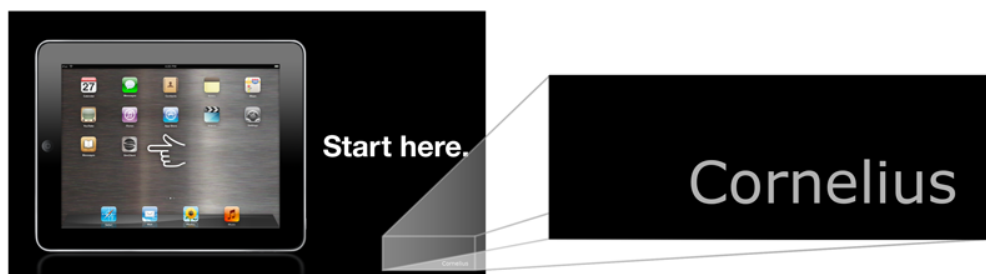
2.1 Unpacking Compass

1. Remove Compass from its case and set on a stable surface.
2. Lift open the monitor.
3. Plug the power cord into Compass and into an electrical outlet.
4. Press the power button to turn on Compass.
5. If desired, plug the fluoro foot pedal into Compass and place the pedal on the floor.
6. Place the desired catheters on the table next to Compass.
7. Remove the iPad from the Compass case and turn it on.

2.2 Connecting an iPad® to your Compass

While an iPad typically comes with a Compass simulator, any iPad can be used to control any Compass. The following steps need to be performed in order to have an iPad control your Compass, including the iPad that comes with your Compass:

1. Install SimClient™ on the iPad.
 - a. While connected to the Internet, launch the App Store on your iPad. You will need an AppleID to do this. If your iPad is not already set up with an AppleID please contact your IT department.
 - b. Search for SimClient and click on the FREE button to install the app.
 - c. You will need to enter the password for your AppleID in order to install SimClient.
2. Connect the iPad to the Compass Wi-Fi network.
 - a. Turn on your Compass.
 - b. Locate the name of your Compass which is displayed in the bottom right corner of the Start here screen:



The name of the above Compass is "Cornelius"

- c. Launch Settings on your iPad.
 - d. Touch Wi-Fi and choose the network which matches the name of your Compass
 - e. Enter the Wi-Fi password for your Compass (this will be "simsuite" if you have not yet changed it).
3. Launch SimClient and select your Compass.

- a. Touch the SimClient app icon.
- b. Select your Compass from the list of Available Devices.

Hint: If your Compass does not appear, check your Wi-Fi connection by repeating steps 2a - 2e above.

2.3 Changing the Wi-Fi Password

The default Wi-Fi password for Compass is `simsuite`. It is important to change the password from this default or anyone with an iPad who is familiar with Compass can connect to your Compass, run your courseware and access your courseware's documentation.

To change the Compass Wi-Fi password:

1. Touch the Triangle icon in the top right corner of the Compass Courseware menu, then select Settings.
2. Select Wi-Fi on the left to display the Wi-Fi page.
3. Touch the password, then type in a new secure password (twice) and touch Apply. Passwords must be at least 8 characters long.
4. Compass will reboot once you leave the settings page.
5. After Compass reboots, launch Settings on your iPad.
6. Touch Wi-Fi and choose the network which matches the name of your Compass.
7. Enter the new Wi-Fi password for your Compass.

Hint: If you don't change the name of your Compass as well, your iPad might not prompt you for a new password but instead try to connect with the old password and fail to connect. In this case, in the Wi-Fi Settings on the iPad, touch the blue arrow on the right side of the Wi-Fi network which matches the name of your Compass and then touch Forget this Network. Touch the network matching your Compass name again and this time you will be prompted for the new password.

2.4 Changing the Name of Your Compass

You may also want to change the visible name of your Compass to something more personal like "Chris Compass" or "ACME West Region Compass" or "Kumquat". To change the Compass Wi-Fi name:

1. Touch the Triangle icon in the top right corner of the Compass Courseware menu, then select Settings.
2. Select Wi-Fi on the left to display the Wi-Fi page.
3. Touch the current Wi-Fi name, then type in a new name and touch Apply.
4. Compass will reboot once you leave the settings page.
5. After Compass reboots, launch Settings on your iPad.
6. Touch Wi-Fi and choose the network which matches the new name of your Compass.
7. Enter the Wi-Fi password for your Compass.

Chapter 3: The Basics

3.1 Unpacking Compass

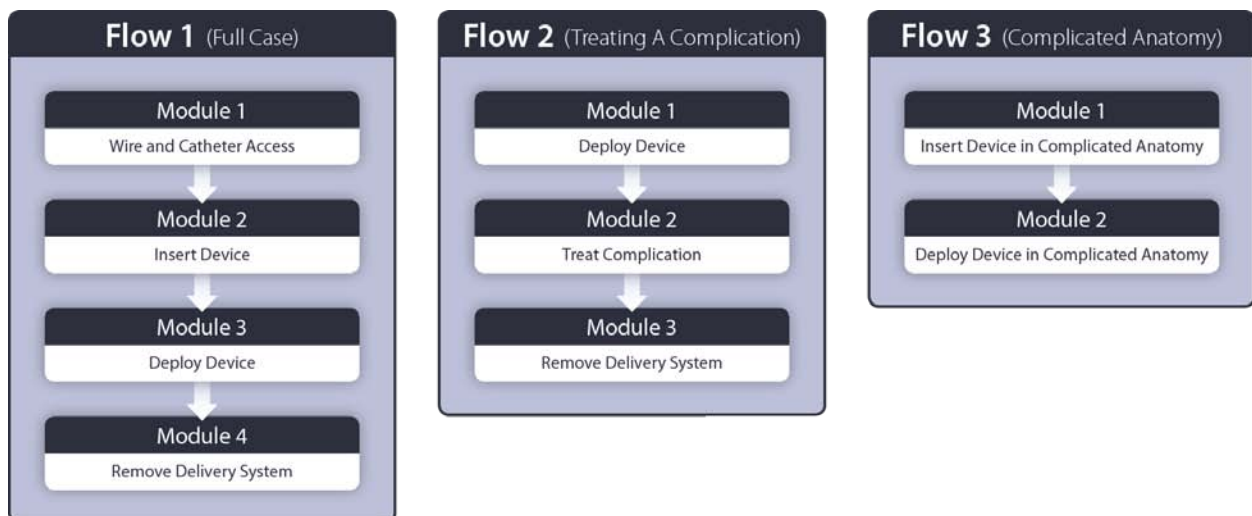
See page 7 for instructions on getting Compass from its case and setting everything up.

3.2 Flows and Modules

Compass does not restrict simulation training to complete cases, but instead allows you to interact with the trainee using small portions of cases called “modules”. The content of each module is based upon natural breaks in the procedure, parts of the procedure you might want to jump directly to and various alternative parts of a procedure you might want the trainee to experience.

Modules can be organized into flows to provide a connected series of training pieces for the trainee. A flow may be an entire case or it may be just a part of a case. A flow could also be repeating the same part of a procedure in several different anatomies in order to reinforce key teaching points.

When you launch SimClient and choose a courseware program, you are initially presented with a series of flows. Select the desired flow and then choose the module within that flow you wish to start with. After completing that module you can touch Next to move to the next module in the flow, Select Module to pick a different module in the flow, or Restart Module to restart the current module from the beginning. You can also touch End Simulation to go back to the Compass Courseware menu and select a different flow or even different courseware. In this way you can easily navigate to any part of your simulations in order to give the trainee the best possible training experience.



Example of Three Flows Each Containing Several Modules

3.3 Starting a Simulation Module

On the iPad:

1. Start the SimClient app.
2. Select the desired Compass from the Available Devices on the top left.
3. Select the desired training course from the Courseware Training Menu.
4. Select the desired training flow
5. Select the desired module.

Note: Depending on what was running on the iPad when it was last used, steps 1, 2 or 3 may not be necessary.

3.4 Using a Simulation Module

The following functionality is available within any simulation module by touching the buttons along the top, bottom or left side of the iPad.

Clinical Overview

A module starts by showing the Clinical Overview page. This page has two sections that you can switch between using the buttons on the top of the page:

Objectives – A list of the key objectives or teaching points that the trainee should accomplish while running the module. A green checkmark or a red X will appear next to each objective as the user accomplishes or misses that objective. It may be helpful to discuss these objectives with the trainee either at the start or end of the training.








Procedures – A list of the procedural steps that should be followed in the module. The steps are listed in order so this is a reference guide on how to run the module, whether you are new to the module or just need a refresher.

Equipment

Use the Equipment page to select the wire, catheter or other equipment that the trainee wants to use. The most common equipment is often pre-selected, meaning that for many modules there is no need to visit the Equipment page. Note that some modules allow you to select different equipment for the patient's left and right side.

Angio

The following selections are available on the Angio page:

	<p>Press once to start recording, press again to stop. (Note: the captured cine will immediately start playing in a loop once you stop recording.)</p> <p><i>Hint: You know you are recording when the red button is pulsating and the Record icon displays next to the fluoro screen.</i></p>
	<p>Press to play cine loop.</p> <p><i>Hint: You know you are playing a cine loop when the Playback icon displays next to the fluoro screen and the Pause button is available to let you pause the loop.</i></p>
	<p>Press to pause cine loop.</p>
	<p>Press to go to beginning of loop.</p> <p><i>Hint: This and the following three choices are only available when a cine loop has been paused.</i></p>
	<p>Press to advance to the previous frame in the loop.</p>
	<p>Press to go back to the next frame in the loop.</p>
	<p>Press to go to end of cine loop.</p>
<p>Capture Image</p>	<p>Press to capture a reference image. One reference image can be captured per cine loop.</p>
<p>Subtract Angio</p>	<p>Press for digital subtraction. The first frame of the angio is digitally subtracted from the angio loop being recorded or played back.</p> <p>Press again to return to the standard angio view.</p> <p><i>Note: Subtract Angio is only available during angio record or playback.</i></p>

	Press for roadmap. Contrast is injected through the catheter and then that image is subtracted from the live fluoro view.
Roadmap	Press again to return to the standard fluoro view. <i>Hint: Roadmap only works in live fluoro (not during angio record or playback) and only if a catheter capable of injecting contrast is in the patient's anatomy.</i>
Loops	Press to select a particular cine loop.
Captures	Press to select a particular captured image.

Patient Presentation

Select from the various choices on this page to display patient and/or device information to the trainee on the Compass screen. Typical types of information include Patient Profile, Anatomy Animation and Measurements.

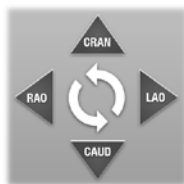
Next Button

This button is available in the top right corner of the iPad screen. It is used to advance to the next module in the flow, typically after the user has completed the current module.

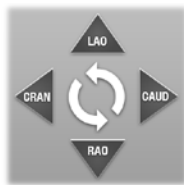
Hint: A different module can be selected or the current module can be restarted using the Actions menu. See page 14 for details.

C-Arm

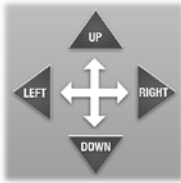
Show or hide the C-Arm panel by touching the C-Arm button in the lower right corner of the iPad screen. The following selections are available on the C-Arm panel:



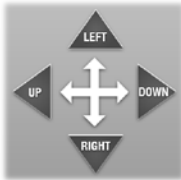
Simple Mode: Use the four arrows to move the virtual C-Arm in order to view different angles of the patient's anatomy. Simple mode is typically best for someone who has not spent significant time operating a C-Arm.



Clinical Mode: Use the four arrows to move the virtual C-Arm in order to view different angles of the patient's anatomy. Clinical mode is typically best for someone who is used to operating a real C-Arm.



Simple Mode: Use the four arrows to move the virtual table in order to view different areas of the patient's anatomy. Simple mode is typically best for someone who has not spent significant time operating a C-Arm.



Clinical Mode: Use the four arrows to move the virtual table in order to view different areas of the patient's anatomy. Clinical mode is typically best for someone who is used to operating a real C-Arm.



Press + to increase the magnification, - to decrease magnification.



Press + to raise the table, - to lower the table.

Note: This control is not available in Simple Mode, use the magnification control instead.

Presets

Select from one or more preset views for the module.

Hint: If you manipulate the C-Arm and get "lost", select Presets to return to a known view of the anatomy.

Live Fluoro

Return to live fluoro after viewing cine loops using the Angio page.

Hint: Pressing the fluoro pedal will also return to live fluoro.

Fluoro Lock

Toggle fluoro to be always on rather than requiring someone to step on the fluoro pedal.

Hint: If you do not plug in the fluoro pedal (or unplug the pedal at any time), Compass will detect this state and automatically turn on fluoro lock.

Contrast Buttons

The contrast button or buttons are always available in the top left of the C-Arm bar. Press on one of the buttons to inject contrast into the simulated patient. The number of buttons displayed is based on the number of catheters available through which contrast can be injected in that module. A button will be disabled if that catheter is not inserted into the patient.

Contrast can also be controlled using a contrast syringe plugged into Compass. See page 20 for details.

Actions Menu

Access the Actions Menu by touching the Actions button in the top left corner of the iPad screen. The following selections are available in the Actions Menu:

Restart Module	<p>Restart the current module from the beginning.</p> <p><i>Hint: Use this to allow the trainee to practice the current module another time or if the simulation gets into an unexpected situation and you need to quickly restart the module.</i></p>
Select Module	<p>Select and start any module in the current courseware selection without having to end simulation and return to the Compass Courseware menu.</p> <p><i>Hint: You can press Next in the upper left of the iPad screen to go directly to the next module in the flow.</i></p>
Main Monitor Display	<p>Select what is displayed in the primary display area of Compass' built-in monitor. You can choose from the fluoro screen (which also displays angio loops), the reference screen (which displays captured images from angio loops) and the ECG screen.</p>
External Monitor Display	<p>Select what is displayed on an external monitor plugged into Compass. As with the main monitor, you can choose from the fluoro, reference and ECG screens.</p> <p><i>Hint: The external monitor should be plugged into the HDMI port.</i></p>
Preferences	<p>Change the EKG volume or turn on or off Simple C-Arm Mode (Simple C-Arm mode is On by default and is typically best for someone who has not spent significant time operating a C-Arm).</p>

Refresh iPad	Choose this to recover from certain situations in which the selections made on the iPad are not affecting your Compass. <i>Hint: If this doesn't work, refer to the Compass Troubleshooting Guide.</i>
End Simulation	End the simulation and go back to the Compass courseware menu. This will allow you to select a different flow or different courseware.

3.5 Packing up Compass



1. Remove all wires and catheters from Compass.
2. Press the power button to turn off Compass.
3. Unplug Compass from the wall.
4. Remove the power cord from Compass.
5. Place any wires or catheters that are stored below Compass into the case.
6. Place Compass in the case.
7. Turn off the iPad.
8. Place the iPad in the iPad envelope in the case.
9. Pack the fluoro pedal, the power cord and the iPad cord in the Compass case.
10. Close case and secure latches.
11. Pack the catheters in the catheter case.

Chapter 4: Some Details

4.1 Action Menu

Touch the Triangle icon in the top right corner of the Compass Courseware menu to choose from the following options on the Action menu:

Install/Update

Courseware and other updates are installed onto Compass using a USB drive (memory stick / thumb drive) plugged into one of the USB ports on Compass. The Install/Update page lists all of the courseware and other updates available to install from that USB drive. The page also lists all applications currently installed on your Compass including information about which version of the applications are installed. The page can also be used to delete applications from your Compass.

The Install/Update page has two sections that you can switch between using the buttons on the top of the page:

Available – A list of everything available to install from the USB drive inserted into Compass. This includes new courseware and updates to currently installed courseware, as well as updates to the Compass OS (the basic software that lets Compass run simulations).

Installed – A list of everything currently installed on your Compass. This list is broken into two sections. Out of Date is a list of currently installed applications which have available updates. Typically you should update everything in this list by selecting the application and touching Update. Up to Date is a list of everything currently installed on the Compass unit that does not have an available update.

Hint: A red badge with a number will show on top of the Installed button indicating the number of applications for which updates are available.

To install applications on your Compass, follow these steps:

1. Insert the USB drive with the software to install into a USB port on Compass.
2. Select Install/Update from the Action Menu on the Compass Courseware menu.
3. Select the application you wish to install from the list in either the Available or Installed section of the Install Applications page.
Hint: If the applications on the USB drive are not showing, touch Refresh in the bottom left corner of the screen to have Compass search the USB drive again.
4. Touch Install (or Update) on the right side of the screen.

Note: Most Compass courseware will install in less than 30 seconds. A Compass OS update will require approximately two minutes and will reboot your Compass twice.

To remove courseware from your Compass, follow these steps:

1. Select Install/Update from the Action Menu on the Compass Courseware menu.
2. Select the application you wish to remove from the list in the Installed section of the Install Applications page.
3. Touch Remove on the right side of the screen.

When you are done with the Install Courseware page, touch the Home button to return to the main menu.

Settings

The Settings Pages contain information about your Compass and actions you can take to adjust the operations of your Compass.

About

The About page contains information about your Compass including your Compass OS version, your Compass serial number and contact information for Medical Simulation Corporation.

Notifications

Notifications are important information for you about errors or other problems with your Compass. These could be problems with a CIM, errors during a software installation, etc. A notification will provide a recommended action to correct the issue. Once you have taken the action and corrected the problem, you should clear any notifications by touching the Clear button on the top of the page.

Note that you can immediately jump to this page from the Compass Courseware menu's Action menu.

Wi-Fi

The Wi-Fi page is used to set the Wi-Fi name and password for your Compass. See page 8 for details.

Event Log

The Event Log page contains detailed information about what has been happening on your Compass. The Event Logs are used by trained personnel at Medical Simulation Corporation (MSC) to diagnose problems with your Compass. When working with MSC technical support, you may be asked to send your Event Logs to MSC using the Export button in the bottom right corner. Procedures for doing this are in the Compass Troubleshooting Guide.

Pressing Clear in the bottom left corner of the page will permanently erase information in all of your Compass logs.

Weekly CIM Maintenance

Touch “Quickly determine whether CIMs need recalibration” on the right to have Compass check the calibration of your CIMs. Calibration refers to the CIM’s ability to accurately track wires and catheters, as well as being able to determine which wire or catheter is inserted.

You will be asked to remove any wires or catheters from Compass as part of this test. If a problem is found, you will be asked to recalibrate your CIMs (see CIM Recalibration below.) You should perform this step approximately once a week or whenever you start using Compass after not using Compass for a significant time.

CIM Recalibration

Whenever a CIM recalibration is recommended by a user notification (see Notifications on page 18) or by a routine maintenance check (see Weekly CIM Maintenance above), use this page to do the necessary recalibration. You can select from recalibrating the CIMs on rail one (the front rail) or on rail two (the back rail) if there are CIMs installed on that rail.

The prompts on the iPad screen will take you through the steps of recalibrating your CIMs. Recalibration requires the calibration tools that were included with your Compass. Most likely the recalibration will complete successfully and you will be ready to train. In rare circumstances there may still be a problem with your CIM. Follow the onscreen prompts in this situation and contact MSC Technical Support if you have any questions.

New CIM Calibration

Whenever a CIM has been replaced, use this page to do the necessary calibration. You can select from calibrating the CIMs on rail one (the front rail) or on rail two (the back rail) if there are CIMs installed on that rail. The prompts on the iPad screen will take you through the steps of calibrating your CIMs. Calibration requires the calibration tools that were included with your Compass.

4.2 Accessories

Foot Pedal

A foot pedal is provided with every Compass. When plugged into a USB port on Compass, it allows the trainee (or trainer) to use the foot pedal to turn live fluoro on and off.

If the foot pedal is not plugged in, Compass will automatically turn on Fluoro Lock. In this state live fluoro is always visible unless you are watching a cine run (a loop taken on the Angio page).

Contrast Syringe

Note: Never inject liquids into Compass using the contrast syringe. This could permanently damage your Compass simulator.

Your Compass may have come with a syringe that can be used to simulate injecting contrast. (The syringe is optional and may not have come with your Compass.) To use the syringe, plug it into one of the three Compass pressure ports. The proper pressure port is listed in the documentation for your courseware. In order to best simulate the injection of contrast, turn the stop gauge slightly to let air slowly bleed out of the syringe.

If you do not have a contrast syringe or the syringe is not working, you can inject contrast using the button on the left edge of the C-Arm control bar.

Endoflator

Note: Never inject liquids into Compass using the endoflator. This could permanently damage your Compass simulator.

Your Compass may have come with a syringe that can be used to simulate inflating a balloon. (The syringe is optional and may not have come with your Compass.) To use the syringe, plug it into one of the three Compass pressure ports. The proper pressure port is listed in the documentation for your courseware.

If you do not have an endoflator or the endoflator is not working, you can always inflate the balloon using the buttons on the Module Control page on your iPad.

4.3 External Monitor

Compass can be connected to any external monitor or television with an HDMI port (HDMI cable not included). This can be useful at a conference or group training session where you want a larger group to watch what is happening in the simulation.

No settings need to be adjusted when an external monitor is plugged in – it simply works. By default it displays the fluoro screen. Using the Actions menu in any simulation, you can choose to display the reference image (an image captured from an angio recording) or ECG screen instead.

To display a different screen on the external monitor:

1. Start a simulation module (the external monitor doesn't show anything until you start a simulation module).
2. From the Actions menu choose External Monitor.
3. Select the screen you wish to have displayed on the external monitor.

4.4 Documentation

Documentation describing in general how to use Compass (what you are reading) and documentation for the specific courseware installed on your Compass is stored within the SimClient app on the iPad. This means you can read the documentation even if you are away from your Compass or your Compass is turned off.

When you first install SimClient on your iPad, the only documentation available is the QuickStart video which shows you how to set up Compass. Once you have followed the steps shown in the QuickStart video (and described on page 7 of this manual), SimClient will automatically download this manual and the documentation for any courseware installed on your Compass.

Hint: This documentation is available on the first page of the SimClient. If you are connected to your Compass and looking at the Compass Courseware menu, you must press Back in the upper left corner in order to get to the documentation.

Any time you install a new course on your Compass or update an existing course, the new documentation will be downloaded to SimClient on your iPad immediately.

Hint: If you just received new courseware for your Compass but don't have time to try it out before you travel, install the courseware before you leave and you can review the documentation on the airplane!

Chapter 5: Tips on a Successful Training

While Compass is a powerful training tool, the success of your training events will depend on you as well as your simulator. Like many things in life, planning and attitude make a huge difference. Here are some practical suggestions on how to make your training event as successful as possible.

Before the Training

Several days prior to training, turn on Compass and run through the courseware you will be using. If you find a problem or are missing any equipment, this allows enough time to get the issue resolved.

Practice teaching the courseware, not just using it.

The night before the training, turn on Compass again and run through the courseware you will be using. You want to be comfortable running the simulation so you can focus on the trainee, not on the technology.

Charge your iPad.

Select a room that is large enough for the number of attendees and simulators, but not so large that it seems like you don't have enough interest to fill the room.

Arrive early enough to allow time for setup. If you weren't able to verify Compass the night before or if Compass might have been handled roughly since you last used it (i.e. by airline staff), allow adequate time for troubleshooting prior to your training session.

At the Training

If you do not know the trainee(s), introduce yourself and any other instructors. Let the trainees know who you are and what your experience level is. It is important for the trainees to know why you are qualified to be training them.

If this is a longer training session rather than a short procedural demo, consider the following:

1. Provide an outline for the participants including the teaching plan and the time schedule.
2. Frequently change the mode of information delivery (lecture/simulation/hands on/etc.)
3. Engage the group, promote interactions, discuss the courseware as a team.
4. Reinforce positive behavior and decisions.

Create an environment that will allow the learner to ask questions without fear of appearing stupid or inexperienced.

If something goes wrong, work through it. Don't blame the simulator or the person who shipped the equipment or the last trainer. A good simulation training session has an element of theater and like any good theater the actors must continually adjust to their environment. For example, if you have to restart the simulation, do so while you continue to talk and teach. Chances are the trainee won't even

realize what happened and once they leave they won't remember the problem but instead will remember an outstanding training experience.

Relax and have fun – it's contagious!

A couple additional notes for a conference

When no one is using Compass, record a short angio showing catheter movement and contrast. The loop playing will generate more interest than just a static image.

If you haven't been using Compass for a while and aren't sure what was done last in the module, just move the catheters to their starting locations for that module (remove them if you're not sure) and restart the module. This will get you back to a known state.

Chapter 6: Service and Support

The Compass Troubleshooting Guide is a valuable resource covering the following topics:

1. Troubleshooting
2. Inside the Catheter Rail
3. Sending Logs to MSC Support
4. Cleaning Procedures
5. Replacing a CIM
6. Missing iPad? No Wi-Fi? Use a laptop instead.
7. Restore Compass to Factory Defaults
8. Ordering Replacement Parts
9. Finding Your Serial Number

For any other questions or issues with your MSC Compass simulator, please use the following contact information:

Technical Support

1-866-246-8057

1-303-261-8207

www.medsimulation.com/support

simulator.support@medsimulation.com

General Contact Information

Medical Simulation Corporation

4643 South Ulster Street, Suite 650

Denver, CO 80237

1-888-889-5882

1-303-483-2800

1-720-489-8100 (fax)

www.medsimulation.com

info@medsimulation.com

Chapter 7: Specifications

7.1 Technical Specs

General

Model Number	COMPASS-1
Serial Number	Found on the bottom of the unit or on the About page of the Compass Courseware menu

Operating Environment

Operating Temperature	0° – 40° C (32° - 104° F)
Humidity Non-condensing	5% - 85%

Power

Voltage	100 - 240 V AC
Current	1.5 A at 120 V, 0.75 A at 240 V
Power	100 watts

7.2 Warnings/Labels

General

1. There are no user serviceable parts inside of the secured cover.
2. Do not use around water.
3. Use only as directed in the manual.
4. Keep these instructions.

FCC Declaration of Conformance



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CIM Modules and Electrostatic Discharge



The Catheter Input Modules (CIMs) that are connected under the hinged lids on either side of the Compass system are sensitive to electrostatic discharge. This area should only be accessed by a trained technical user.

7.3 Additional Regulatory Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Conformité aux normes FCC cet équipement a été testé et trouvé conforme aux limites pour un dispositif numérique de classe B, conformément à la Partie 15 des règlements de la FCC. Ces limites sont conçues pour fournir une protection raisonnable contre les interférences nuisibles dans une installation résidentielle.

Cet équipement génère, utilise et peut émettre des fréquences radio et, s'il n'est pas installé et utilisé conformément aux instructions du fabricant, peut causer des interférences nuisibles aux communications radio.

Rien ne garantit cependant que l'interférence ne se produira pas dans une installation particulière. Si cet équipement provoque des interférences nuisibles à la réception radio ou de télévision, qui peut

être déterminé en comparant et en l'éteignant, l'utilisateur est encouragé à essayer de corriger les interférence par une ou plusieurs des mesures suivantes:

- Réorienter ou déplacer l'antenne de réception.
- Augmenter la distance entre l'équipement et le récepteur.
- Branchez l'appareil dans une prise sur un circuit différent de celui auquel le récepteur est connecté.
- Consultez votre revendeur ou un technicien radio / TV pour assistance. Avertissement

Les changements ou modifications à cet appareil sans expressément approuvée par la partie responsable de conformité pourraient annuler l'autorité de l'utilisateur de faire fonctionner cet équipement.

FCC section 15.21 requires that you be cautioned that changes / modifications not approved by MSC could void your authority to operate the equipment.

FCC section 15.21 exige que vous soyez averti que les changements ou modifications non approuvés par le CSM peut annuler votre autorisation à utiliser l'équipement.

This device complies with Industry Canada license-exempt RSS standard(s).

Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme avec Industrie Canada exempt de licence Rss standard(s).

Son fonctionnement est soumis aux deux conditions suivantes :

- (1) cet appareil ne peut causer d'interférences, et
- (2) cet appareil doit accepter toute interférence, y compris des interférences qui peuvent provoquer un fonctionnement indésirable du périphérique.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

7.4 Legal Information

Compass Operations Manual Revision 1.0

Copyright © 2012 Medical Simulation Corporation

This document contains confidential and privileged information. Any unauthorized disclosure or distribution is prohibited.