



Deliver a Real Shock with  
Your Defibrillator  
on SmartMan

Applies to  
SMALV AW201SH SmartMan ALS Shock Pro  
SMGLV MGLV201SH SmartMan Megacode Shock Pro  
RSIMTASK, RSIM TEAM RSIM1  
RSIM ARDS

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## Training with Your Defibrillator

### *Using Your Own Defibrillator/Monitor to Deliver a Shock During Training*

#### Why use Your Defibrillator

Defibrillation is a crucial step in the chain of survival when responding to a cardiac arrest. It is essential! It must be done.

#### During Training

It is always best to practice on the device that you would use if faced with the situation. However, this is often not possible due to cost, available defibrillators and many other variables such as: training centers often have different models; they are often given hand-me-downs of devices no longer in use; people attending training sessions come from different centers where they use different devices. Given the reality of training, it is often not the case that people practice on the device they would be using.

#### AHA Requirements

The AHA specifies in ACLS classes that the Team Leader is supposed say when to analyze, identify the heart rhythm, press the charge button, clear everyone, and press the shock button.

#### Familiarization.

Regardless of whether you train on your own device or not, it is important that all of the people involved in the cardiac arrest response become familiar with what has to be done in order to deliver a shock.

It is the procedures, roles, how to work with others in the context of delivering the shock, that is crucial. Students should learn how to connect all of leads and power cables required, how to turn on the defibrillator, how to interpreted the heart rhythm, how to press analyze, change the energy, charge the device, clear everyone and press the shock button. Students should learn how to connect the electrode pads when compressions are ongoing. The movement of people and how it interferes with others who are maintain the circulation and oxygenation of the patient is often overlooked. They are equally important and need to be practiced.

#### Complete Procedure

SmartMan is designed to provide practice in the complete procedure during a response to cardiac arrest. Actual procedures with the time running and people moving about to perform skills are practiced, and the report on how it created time off chest and was detrimental to circulation in the patient are part of the reporting process.

You fully meet the requirements of the AHA Guidelines and perform Best Practice Training and you enhance the realistic nature of your training by following the SmartMan procedures with your own defibrillator.

Advantages to using the system described below:

- Increased Safety for Students
- Cost Savings

- Realistic Training Environment with Actual Procedures
- Practice connecting the electropads as they normally would on a real patient when the chest in moving for chest compressions.
- Students have to move around the manikin when placing the electropads on the manikin and thus learn how they have to work around other responders who are performing procedures that are ongoing as the pads are placed.

## Delivering a Shock with your Defibrillator/Monitor on SmartMan (Note that the shock is actually delivered)

1. Connect Pads Cable to your Defibrillator Monitor.

*The one shown is a PhysioControl and the Pads cable connects at the front. Your monitor may be different.*



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Picture shown with Pads cable attached to the monitor.



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2. Connect the free end of the pads cable which is coming from the monitor to the **plug on the white wire coming out of the rhythm generator.**

*When reading the letters on the rhythm generator, this is the top end of the box.*



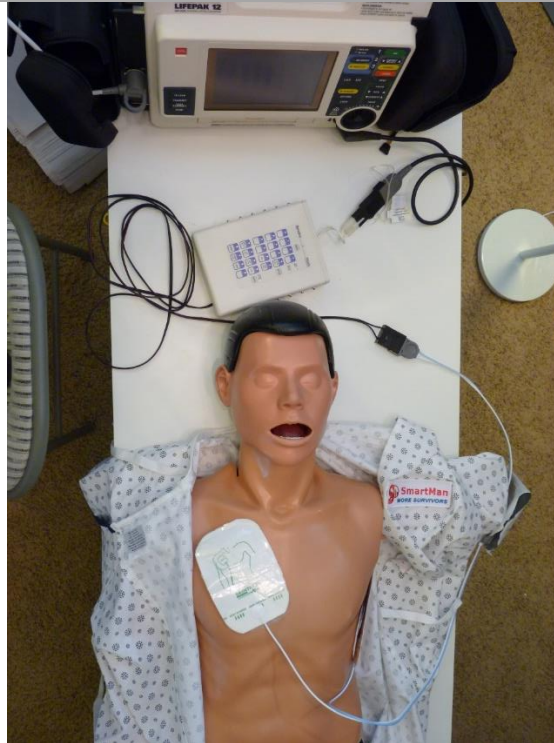


3. Connect the Pads to the **black** cable which comes out of the other end of the rhythm generator.

**IMPORTANT  
DO NOT REVERSE THIS**



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4. Apply pads to SmartMan simulator



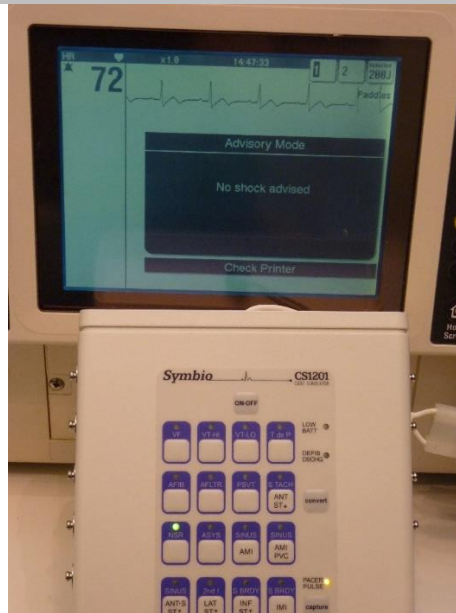
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5. Turn on the Defibrillator Monitor.  
Turn on Rhythm Generator.  
Select Rhythm on Rhythm  
Generator.  
Select Analyze on Monitor
-

Example 1.

On the Rhythm Generator,  
Press the NSR Button.

On Your Monitor, Select Analyze.  
The monitor will interpret and  
display the rhythm and depending  
on your monitor will say it out loud.

It will then indicate “No shock  
advised”.



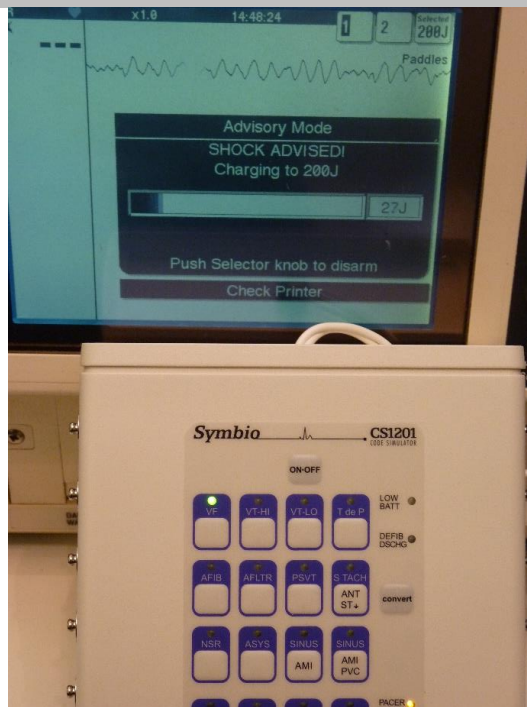
Example 2.

On the Rhythm Generator  
Press the VF Button.

On Your Monitor, Select Analyze.  
The monitor will interpret and  
display the rhythm and depending  
on your monitor will say it out loud.

It will then indicate “SHOCK  
ADVISED”.

On many monitors you can set the  
power level that it will shock at.  
Some monitors will charge  
automatically on others you will  
have to push a button to tell it to  
charge.

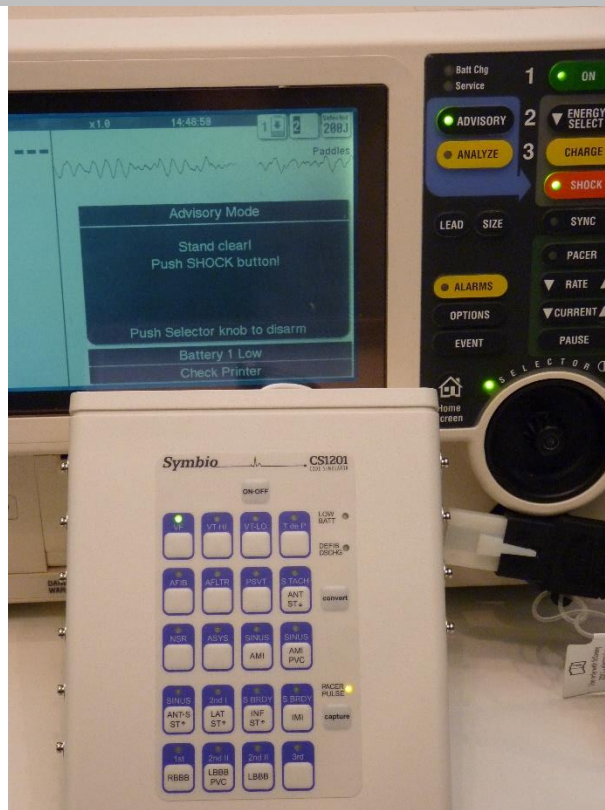




When the monitor is charged it will indicate for everyone to stand clear.

You can then press the Shock Button to deliver the shock.

You can pre-set the rhythm generator to automatically convert to a normal sinus rhythm once the shock is delivered. This would then be displayed on the monitor.



## Shocking a Manikin

Here are a few points to educate and inform your clients on the differences between **Using or Not Using Conductive Posts** (which stick out of the chest of the manikin). There are several ways that training centers practice using their Defibrillator Monitors and integrate it into their Mock Code Training.

One solution involves placing external conductive posts which protrude through the skin of the manikin and absorb the shock inside of the manikin. Another solution does not involve use of external conductive posts. Both options offer practice using their own Defibrillator Monitor.

The key learning points which both solutions address are the following:

- Recognize the heart rhythm on their Defibrillator Monitor;
- Student can Set the Energy Level that they want to use;
- Charge the monitor;
- Deliver the shock by pressing the Shock Button. The shock is really produced and really delivered at the voltage they set.

You fully meet the requirements of the AHA Guidelines and perform Best Practice Training WITHOUT having conductive posts in your manikin and you enhance the realistic nature of your training. The vast majority of places where they perform Best Practice Training use the method without external conductive posts. It is more real-to-life.

Advantages to using the system WITHOUT Conductive Posts

- Increased Safety for Students
- Cost Savings
- It is a More Realistic Training Environment as Real Patients do not have posts
- With posts people tend to stand back and watch rather than performing their other response tasks on the patient
- Students receive practice connecting the electrode pads as they normally would on a real patient
- Students have to move around the manikin when placing the electrode pads on the manikin and thus learn how they have to work around other responders who are performing procedures that are ongoing as the pads are placed.

External Posts are required if you use paddles on a manikin. You must use “landing pads” on top of the posts to shock with paddles. However, the posts do not increase the reality of the practice of using paddles. The main teaching points with paddles is to learn how to position the paddles on the human chest so a) the rhythm can be read, b) keep the paddles in the correct position from reading the rhythm to delivering the shock with the buttons on each of the paddles, c) viewing the physical response when the shock is delivered. No manikin with posts provides any of these key points.

With posts you can also deliver a shock in defibrillator mode. You must connect training cables (not paddles) to the top of the posts to specific clips to the posts.

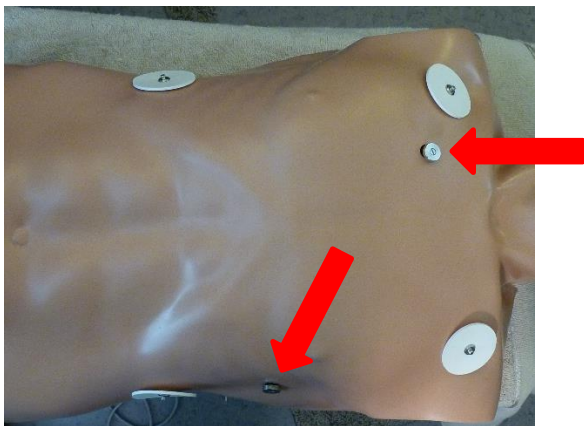
SmartMan can add the External Conductive Post if your client wishes to purchase a manikin with these.

## How to Practice Shocking Manikin with Conductive Post

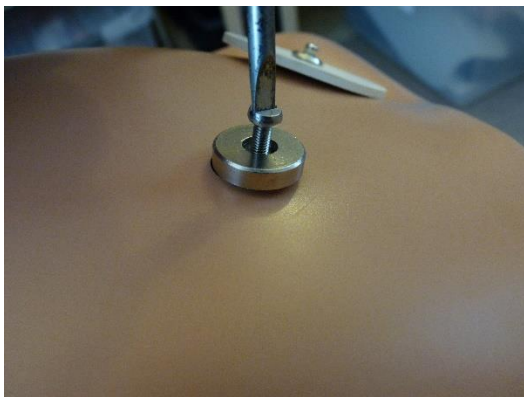
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### Applying the Landing Pads

1. Manikin must have post.



2. Remove middle screw from each post.



3. Place large steel washer over the post and use the flat head screw (not the one removed) and screw into place. It should be completely flat.



## To Shock with Paddles

1. Put defibrillator monitor into manual mode and set the energy setting
2. Position the paddle onto the “landing Pad” “Conductivity Pad” so that it is perfectly flat and parallel and touching all of the landing pad.
3. Charge the defibrillator monitor
4. Make sure everyone is clear form the manikin

**\*For safety:** We recommend that before the shock is delivered, someone turn down the energy to 10mA. There will be no difference to the procedure and the shock will still be delivered.

5. Click the buttons on each paddle at the same time to deliver the shock

**Note:** Do NOT issue more than 1 full charge.

6. Pull the paddles away and put them into their holders.