# SmartMan Code User Manual – 4.0 Running The Code

For SmartMan Code, Megacode and Megacode Low Volume

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SMARTMAN CODE MEGACODE MEGACODE LOW VOLUME

This activity helps to improve how teamwork outcomes in response to a Sudden Cardiac Arrest event. This normally is run with a group of between 3 and 6 people and one person is usually nominated as Team Leader, or Head Nurse, or Code Nurse, etc.

SmartMan Megacode is designed to give maximum flexibility to how the code is run. You coordinate the roles and SmartMan will provide an accurate time line of critical events. It also will provide an accurate detail related to how the CPR skills were performed during the code.

SmartMan Code Training is also the only product in the world that is providing best practice training for AHA and Low Volume Protocols.

## 4.0 HOW TO RUN THE CODE SOFTWARE

#### 4.1 SELECT THE ACTIVITY

Login and click on "Adv CPR". Select the code with the protocol you wish to follow: Normal Volume or Low Volume. In the picture below, these are the last two options.

Skill Set Menu					
Compressions		Ventilations	CPR	Tutor	Adv CPR
	Intubated CPR Practice			Intubated CPR Test	
R	Intubation and CPR Practice			Intubation and CPR Test	
vay Cl	Low Vol CPR Practice			Low Vol CPR Test	
d Airv					
ance					
Adv	Code Scen	nario - Normal Vol	ume	Code Scenario -	Low Volume
		Select a Sk	ill Set fro	m above	

You may have one or two options on this page depending on which version you have purchased.

NOTE: In order to have an accurate display for the Low Volume protocol you must have purchased a Low Volume protocol Airway SmartMan ALS manikin, otherwise physical changes must be made if you only have the standard Airway SmartMan manikin.

#### 4.2 KNOW BEFORE YOUR RUN THE CODE

In order to run the code there are a few things you need to know.

4.2.1 Length of Code

The code can run for a maximum of 20 minutes.

#### 4.2.2 How to Start The Code

Start the program when the code is called. As soon as you press the Start Button you will see the timer is running (*in the Data window*). The program must have something performed (such as a compression performed) within the first 40 seconds or it will terminate.

4.2.3 How to Turn on the Event Log

SmartMan records all Critical Events and puts them onto a timeline. You can display this Log as the Code is running. Normally you would have this turned on. On the left side of the window click on the Log Button

4.2.4 How to Stop The Code and Save Results

Stop the code at any time by clicking on the purple STOP Button in the Data window, right of the screen.

When you press the Stop Button, the program will stop. This will save the results and the program will create and display results. This means that you can now view what was done and you can create an After Action Report (AAR) by pressing the "Print" Button (*right side of screen*).

4.2.5 If a Code Stops By Itself No Results are Saved

When the program will stop (time out)

- If you do not do anything within 40 seconds, it will stop. No results will be saved.
- If you do not press the Analyze within 10 minutes, it will stop. No results will be saved.

4.2.6 How to Pause The Code

When the code is being run, a "Pause" Button appears in the Data Window. This pauses the code. This is useful if you need to explain a point. Because some of the graphic calculations are time related, pressing Pause can make these readings be inaccurate.

This button will change to Unpause once clicked. Click Unpause to resume with the code.

4.2.5 Indicate a Critical Event

When a critical event such as establishing an IV or having the AED Analyze takes place you must press the corresponding button on the screen. You can click on the button or press the related keyboard key (highlighted in yellow).

Perform your protocol, click on the button (middle of the screen or press the key)

4.2.6 Print an After Action Report (AAR)

When you have completed a code, the results will be displayed on the screen. To see a complete After Action Report, press the "Print" Button by the right side of the screen. This will be displayed in an html format.

The After Action Report contains the Events TimeLine, a Quick Summary of the Quality of Skills Performed, Each Stage of the Code, Critical events in each stage, and detailed analysis.

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#### 4.3 THE CODE SCREEN

Once you start the Megacode, there are 5 separate areas which display information on what is being performed. You will see the following screen.



## 4.3.1 Information Area (During Code)

This area will give you a status of what have been completed. Normally you would be display the Event Log in this area. It will also be the area where heart rhythms are displayed.

4.3.2 Real Time Feedback Area (During Code)

This is the bottom graph area and is active as you perform CPR. It provides an at-a-glance view of the quality of the chest compressions and the ventilations. The best performance for the patient is bright green. If every bar is not bright green then some aspect of the particular skills needs to be adjusted. The more bright greens produced, the greater the chance that the performance will have a positive influence on survival outcome.

4.3.3 Health Status Area (During Code)

This area provides a graphic display of the relationship between the CPR skills being performed and health status of the patient. By providing CPR to a patient we are not only

concerned with cardiopulmonary resuscitation but also with cardio-cerebral resuscitation. This area gives us a real time display related to our performance. What you see in this area depends on whether you click the "Event" Button or the "Hands-Off" Button.

4.3.4 Health Status Event Button

This Health Status area displays a real time graph of the relationship between chest compressions performed, the quality of those chest compressions, the time from onset of the cardiac arrest and the status of the patient. It provides an at-a-glance view of the current health of the patient. Think of this as representing "blood flow to the brain". You influence the health status score by performing better compressions without interruptions. For either of these, the health score will drop. It will drop to 20% in 50 seconds. If the Health Status is 20% or above you can maintain the status but not improve it.

If Health Status is below 20% you will see it rise with better compressions with no interruptions.

4.3.5 Health Status "Recovery Threshold" line in the "Event" box

This green line indicates the 20% of Health Status

As time progresses the maximum value you can maintain via perfect chest compressions is indicated by the horizontal green line.

4.3.6 Health Status Target Levels

If the code has run longer than 5 minutes a health score of 20% is excellent. With high quality CPR you can keep the flow of blood of an SCA patient at 20% of a normal.

4.3.6 Hands-Off Button

This provides a real time graph of the idealized circulation being provided to the brain of the patient. It shows that even with very good compressions it takes time to build up circulation but circulation drops off very quickly when poor or no compressions are performed. This is an excellent graph to show the effect of fraction (hands-off time)

4.3.7 Intervention Buttons (During Code)

You click on these buttons anytime when the code is active. The time of these interventions will be recorded and will be shown in the results.

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Button M Button	Description Click on this Button or press the letter I on the keyboard to indicate that an IV line has been established. In the on-screen report and in the printed report produced once the activity has ended, it will indicate when the IV line was established.
Drug Buttons	Administer drugs at any time: Epi: Epinephrine Click Button or press <mark>E</mark> Key Vas: Vasopressin Click Button or press <mark>V</mark> Key Amio: Amiodarone Click Button or press <mark>A</mark> Key

	There is no maximum number of times you can press these buttons.
	In the on-screen report and in the printed report produced once the activity has ended, it will indicate which drug was given and when.
InTubate Button	You can intubate the victim during any cycle after the first AED analysis.
	You do not have to intubate. You can continue CPR for every cycle without placing an advanced airway. Once you have an advanced airway, CPR changes to 10:1 ALS. This will happen automatically.
	When the intubation is successful, click on the Intubate Button or press the letter ${\bf T}$ on the keyboard.
	In the on-screen report and in the printed report produced once the activity has ended, it will indicate when intubation has been done.
XTube Button	You can intubate the victim during any cycle after the first AED analysis.
	However there are some situations where the tube might come out or begin to leak. In these circumstances the tube must be removed.
	You must click on XTube to tell the program to switch from 10:1 back to 30:2.
Heart Rhythms	Heart Rhythm Buttons Clicking on a heart rhythm button sets the rhythm to be display to that rhythm.
	<u>Before a code begins</u> , click the Monitor Button to display the rhythm for 6 seconds. <u>During a code</u> , click on the Analyze Button to display the currently set rhythm.
	The rhythm can be set at any time. The rhythm button last pressed will determine which rhythm is displayed when either the monitor or the Analyze Button is pressed.
	The rhythm that was active will be recorded in the Events Log and in the After Action Report

VF Button	This sets the rhythm to Ventricular Fibrillation (VF Rhythm).
VT Button	This sets the rhythm to Ventricular Tachycardia (VT Rhythm).
Brad Button	This sets the rhythm to Bradycardia (Brady Rhythm).
ASys Button	This sets the rhythm to Asystole.
<mark>NSR</mark> Button	This sets the rhythm to a normal sinus rhythm
Monitor Button	This display the current rhythm. It will display for 6 seconds.
Events Button	This displays the Health Status Graph. This responds in real time to the quality of the skills performed. See elsewhere for details.
Initial Health Button	This allows you to set the health status of the patient when you start. It is default to begin calculating from the time of on-set of the cardiac arrest. However, you may wish to set this to a very low status for when help arrives.
Hands- Off Button	This graphically displays the effect of time off the chest and poor quality chest compressions on blood flow.
STOP Button	Stop the megacode activity any time by clicking the STOP Button.
	If you do not click on STOP you will not receive a report and you will not be able to print the report at a later time.
	Maximum time for the activity is 20 minutes. If the program reaches this time limit, the program will end and the results will be saved,
Pause Button	This pauses the code. This is useful if you need to explain a point. Because some of the graphic calculations are time related, pressing Pause can make
Unpause Button	these readings be inaccurate. Click Unpause to resume with the code.
Restart Button	This restarts the Code. No results from the existing code will be saved.
Analyze Button	Use of the AED is the Analyze button. It is activated by pressing the green button to the right. It can be activated at anytime.

	When the button is pressed, a popup monitor will indicate that the AED is analyzing. Although this popup will remain on the screen for 3 seconds, you can continue to perform chest compressions during if you wish.
	It is up to your trainer to determine whether it is a shockable rhythm (in which case you should wait for the AED to charge) or whether it is a non-shockable rhythm. You determine when you re-start chest compressions.
<mark>Shock</mark> Button	This ONLY appears after the Analyze Button has been pressed.
	This indicates that a shock has been delivered. The current rhythm setting and the shock will be recorded in the Events Log and in the After Action Report.

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## 4.3.8 Current Progress Area (During Code)

This area displays information on the elapsed time, number of compressions performed, number of CPR cycles, which cycle you are in, and which stage you are in.

As you move to the next cycle and the next stage information is updated.