

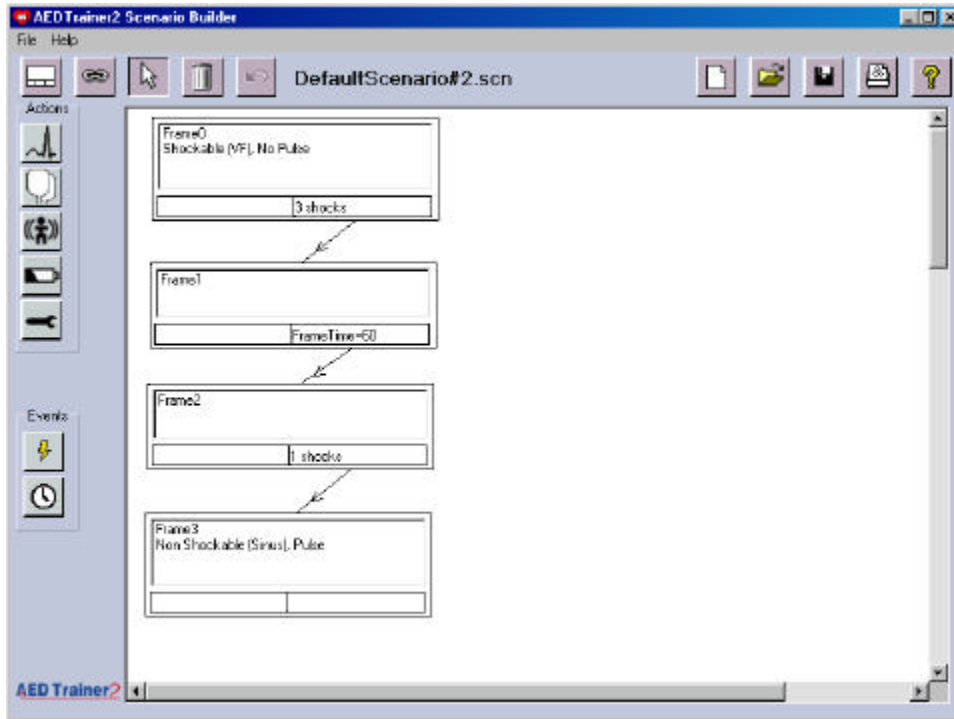
AED Trainer2

Scenario Builder Help

Ver. 1.0

AED Trainer2 Scenario Builder

This is a graphical editing tool, which allows you to make, edit and save pre-programmed scenarios that can be downloaded to the AED Trainer2 custom scenarios, using the AEDTConfig program



Load Scenario

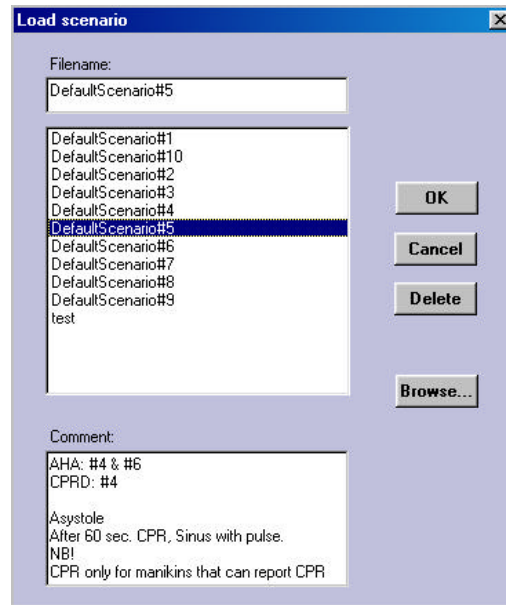


Allows you to load and edit an existing scenario. The function can also be activated from the “File” menu.

Selecting the default "newFile" will present a blank scenario with a blank Frame0.

Delete

The button allows for deleting existing scenarios.



Scenarios are by default saved in, “Scenarios” folder.: \Program Files\AEDTrainer2\scenarios

Browse...

The button allows importing of scenarios from other folders or disk drives.

Save Scenario

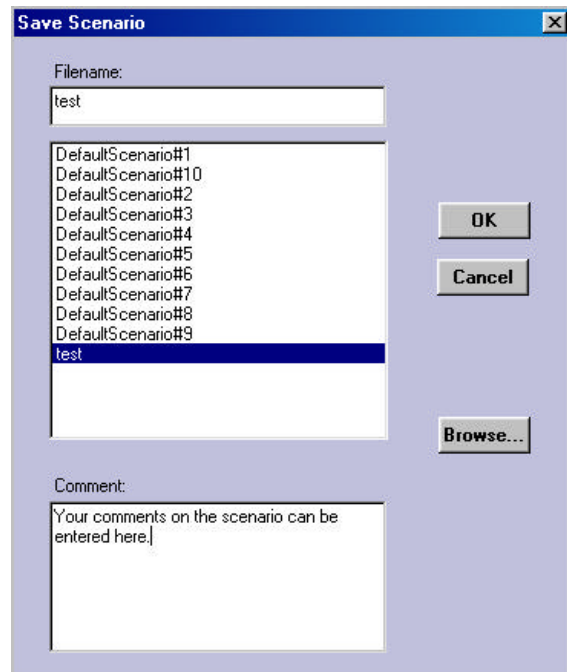


Allows you to save a scenario to the Scenario folder.
The function can also be activated from the "File" menu.




The **Browse...** button allows exporting of scenarios to other folders or disk drives.

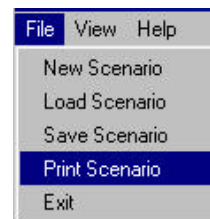
The comment field allows for entering descriptive text about the scenario. This text can be read in the open dialog when a scenario is opened for editing or to be run.



Print Scenario

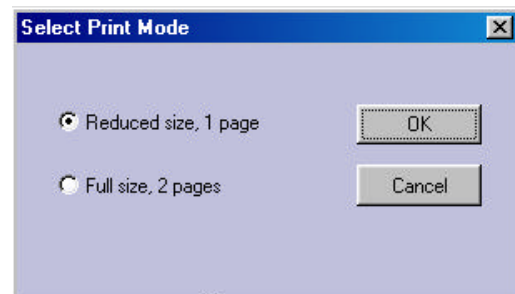


To print a Scenario, click 
or select "Print Scenario" on the "File" menu.



Select print mode in the "Select Print Mode" dialog and click "OK".

"Reduced size", will print the whole scenario over one A4 / Letter page. "Full size" will print the scenario over 2 A4 / Letter pages.



Frames

A Frame represents a patient / AED state in the scenario. The upper large field of the frame, the "Actions field", contains the name of the frame "Framex" and the state descriptions.

An AED Trainer2 scenario is limited to 20 frames.

Frame0 Shockable (VF), No Pulse
3 shocks

Frame0 is always the start frame.

Default state when a scenario starts is:

- Shockable rhythm
- Electrodes OK
- No Motion
- Battery OK
- No error

When running a scenario in the AED Trainer2, the state of the unit will be set to what is described in the "Action field" when the frame is entered. (i.e. ECG will be set to VF etc).

The unit will remain in this state until one of the two events occurs, in which case the scenario will move to the corresponding new frame.

The state descriptions can be set by the various actions that you can put into a frame. If an action is not specified in a frame, the action will remain from the previous frame. (i.e. if the ECG rhythm is not changed in Frame1, then the ECG from the previous frame(s) will still be valid.

The 2 bottom fields are "Event fields", describing 2 events that will make the scenario go to other frames.

FrameTime=30	3 shocks
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In this example the scenario will exit on "Frame Time = 30s" unless 3 shocks are delivered before the 30 seconds has elapsed.

The first of the two events that occur will take the scenario out of the frame..

Example Scenario

The following example shows standard scenario #3 in the AED Trainer2.

The scenario starts in Frame 0 once the electrode pads have been connected, with the heart rhythm set to Ventricular Fibrillation (VF) and the electrode pads loose.

The AED Trainer will say: "Press pads firmly..."

Frame0 Shockable (VF), No Pulse Electrodes Loose
FrameTime=15

After 15 seconds the scenario will proceed to Frame1 where the electrodes are set to OK. The AED trainer will now say "Analysing heart rhythm..."

Frame1 Electrodes OK
1 shocks

When one shock has been delivered, the scenario will proceed to Frame2, where the heart rhythm will be set to a non-shockable sinus rhythm. When the AED trainer analyses it will say "No shock advised...."

Frame2 Non Shockable (Sinus), Pulse

The scenario will remain in Frame2 until AED Trainer is turned off or a new scenario is selected from the remote control.

Creating a Frame

To create a frame click on the "Create Frame" button, then click on the place where you want to place the frame.

The frame will automatically receive a name, which will be displayed in the "Actions field".



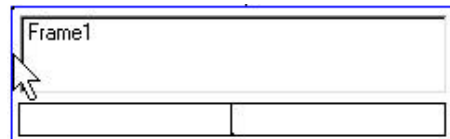
Note that except from Frame0, the frame names do not indicate any order of execution. They are reference names for programming only.

Moving Frames

To move a frame, click on the "Select Frame" button



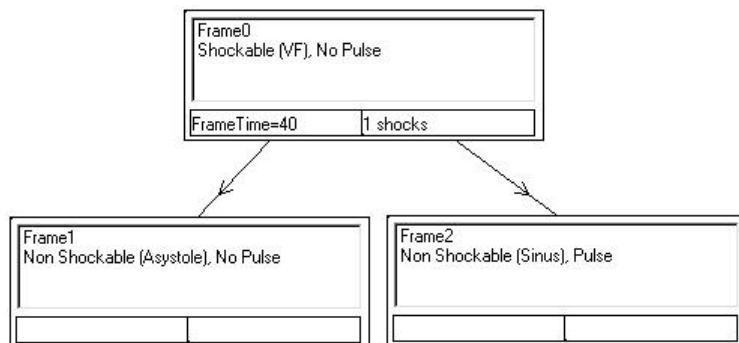
Click on the **border** of the frame you want to move, drag it to where you want it to be placed and release the mouse button.



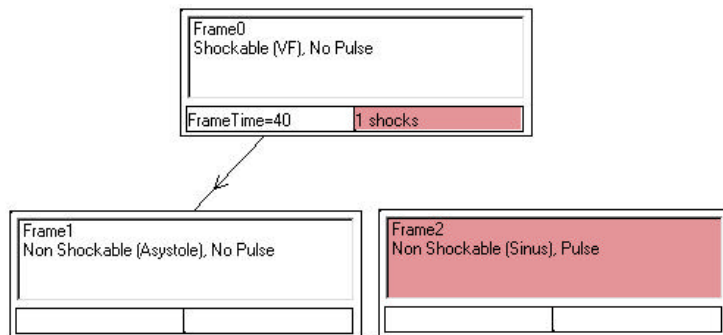
Connecting Frames

The frame connections go from an "Event field" of a frame to the "Action field" of a frame. The connections tell the scenario where to go when an event occurs.

The connection lines have arrows to show the direction of the connection.



If a non-empty Event field is not connected to a frame, the field will be drawn red. An empty Event field, which is connected, will also be drawn red.



If a frame has no input connector, the Action field of the frame will appear red.

To connect frames first click on the "Connect Frames" button. Frames can now be connected in 3 different ways:

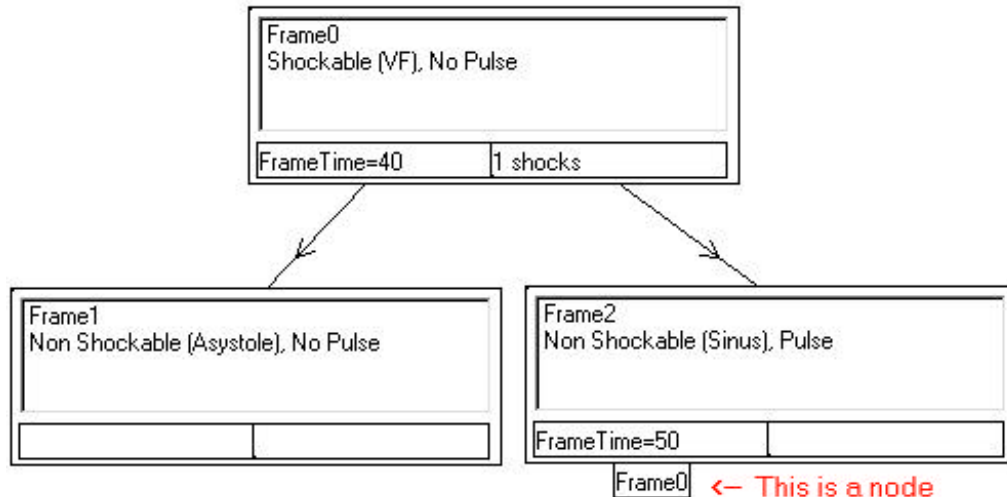


1. Connection with a line.

- Click the mouse down in the "Event field" you want to connect.
Drag the mouse to the "Action field" you want to connect to and release the mouse button.

2. Connecting through a node.

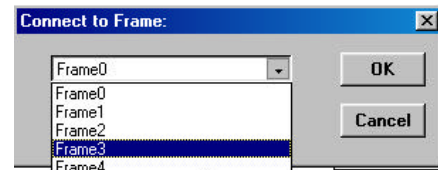
Connecting through a node can be useful when you are connecting backwards in a scenario. Connection lines going back and forth can make the scenario hard to read, while nodes can clean up lines.



The node replaces the line and acts as a “jump to” command. Example: Jump to Frame0.

To connect through a node:

- Click the mouse down in the “Event field” you want to connect.
- Drag the mouse outside the frame and release the mouse button.
- Select the frame you want to connect to from the connection dialog.



Deleting Frames, Connections and Frame Items

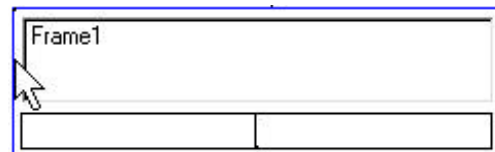
To delete a **frame**, activate "Select frame"




Be aware that “Select frame” will usually be the default mode when no other function is selected.

To remove a **frame**:

Select the whole frame by clicking on the **border** of the frame. (The frame border will be highlighted).

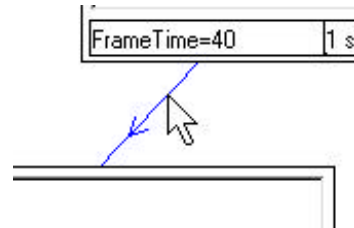


Click on the "Delete Item" button  and the whole frame will be deleted with all its connections.

To remove a **connection**:

Select the connection by clicking on it. (The connection line will be highlighted).

Click on the "Delete Item" button  and the connection will be deleted..

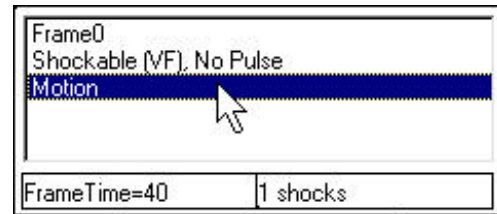


To remove an **Action or Event**:

Select the item by clicking on it. (The item will be highlighted).



Click on the "Delete Item" button and the item will be deleted.



Undoing last deletion.



The last performed deletion can be undone using the button.



Undo is only available for the last deletion. If undo is not possible, the button will be disabled.

Actions

To add or edit **actions** in a frame:



Click on the desired "Action" Button



Then click on the Action field of the frame that you want to edit



Edit the dialog that appears, and click on the OK button



The programmed action will now appear in the Action field of the frame

Available Actions:

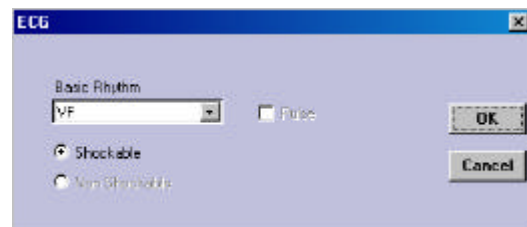
ECG



Allows you to set the ECG, and define other ECG related parameters.

ECG choices are:

- Sinus (non-shockable , with and without pulse),
- VF (shockable, no pulse),
- VT (shockable and non shockable, with and without pulse)
- Asystole (non shockable, no pulse)



For the AED Trainer2 without display, only the shockable / non-shockable parameter is of interest. The pulse parameter is intended for use with manikins that generate pulse.

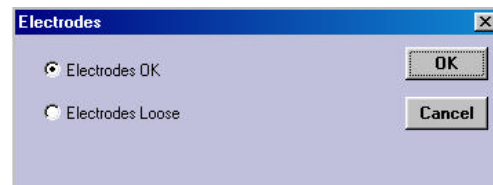


This function is similar to the functions on the remote control.

Electrodes



Electrode pads status can be set to “Loose” or “OK”.



When electrodes are set “Loose” in a frame, the physical electrode connection will be ignored.
The AED Trainer2 will say: “Press pads firmly....” even if the electrodes are attached and connected

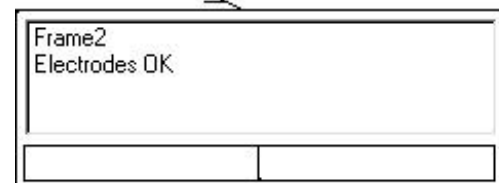
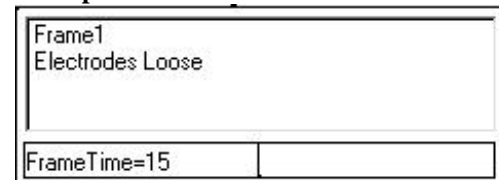
Electrodes must be set to “OK” in another frame to reset the “Loose” condition.

Even if the electrodes are programmed “OK” in the scenario, the physical electrodes must be attached and connected for the AED Trainer to start analysis.



This function is similar to the functions on the remote control.

Example:



Motion



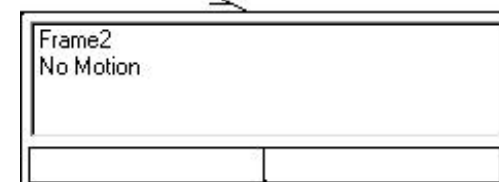
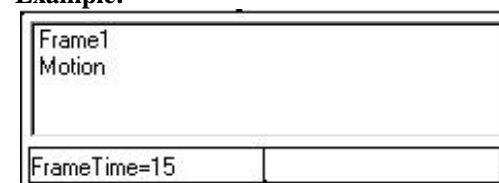
Can be set to “Motion” or “No motion”.



Setting “Motion” a frame simulates noise from patient motion.
The AED Trainer2 will say: “Analysing Interrupted... ..Stop all motion”.

The motion condition will persist until it is reset in and other frame in the scenario with the action “No

Example:

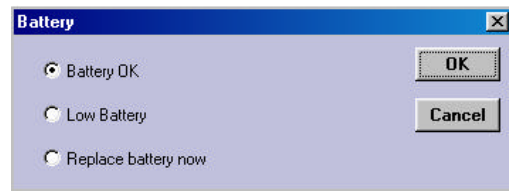


This function is similar to the function on the remote control.

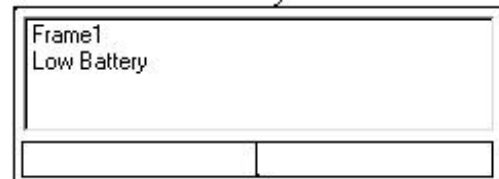
Battery



Battery status can be set to “OK”, “Low” or “Replace Battery”



“Low Battery” simulates a low battery condition. The unit will repeat a “Low battery” voice prompt.



“Replace battery now” simulates a low battery condition, where the battery power is so low that operation cannot continue. The unit will issue the voice prompt “Replace battery now”, become inoperable, and eventually turn itself off.



This function is similar to the  function on the remote control.

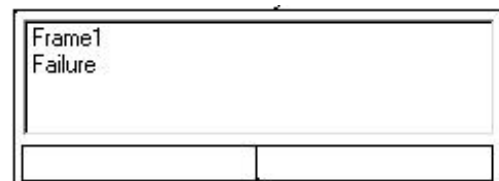
Failure



Failure status can be set to “Failure” or “No Failure”



“Failure” simulates a failure condition in the AED where it can not continue to operate. It will give a periodic “chirping” sound and eventually turn off.



This function is similar to the  function on the remote control.

Events

Each frame can have 2 events that will bring the scenario to another frame.

Unspecified events will never occur even if they are connected. The same is true for unconnected events, even if they are specified.

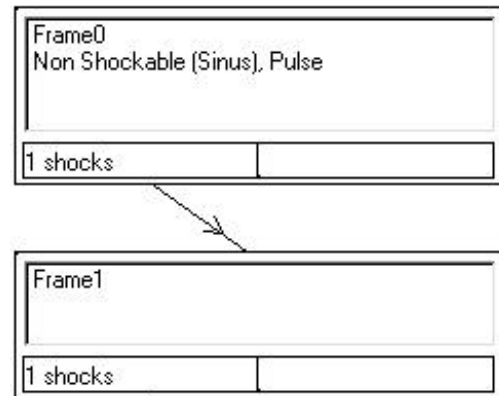
Events must happen in the frame where the events are specified.

Example:

In this example 1 shock delivered will bring the scenario from Frame 0 to Frame1.

Another shock has to be delivered in Frame1 to fulfill the event in Frame1.

Frame1 has no memory of the fact that a shock was also delivered in Frame 0.



Events will be processed in the order they occur.

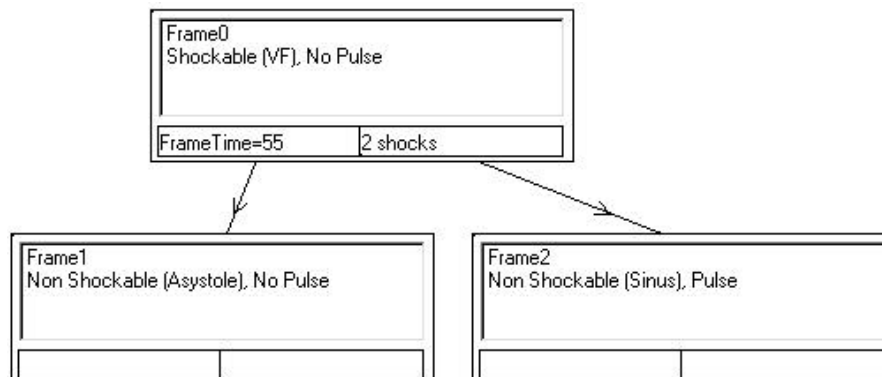
Example:

In the example below, both event fields are used in Frame0.

If two shocks are delivered, the “2 shocks” event has occurred and the scenario will proceed to Frame2.

However, if 55 seconds has elapsed before the 2 shocks were given the “Frame Time = 55s” event will occur first and the scenario will go to Frame1 instead.

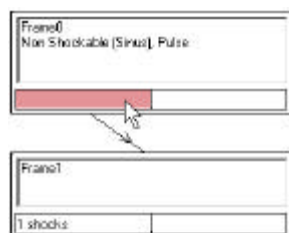
Be aware that a scenario will not start before the electrodes have been connected once. In this example that means that the 55s are elapsed time from first connection of electrodes. The counter will not stop if the electrodes are disconnected later.



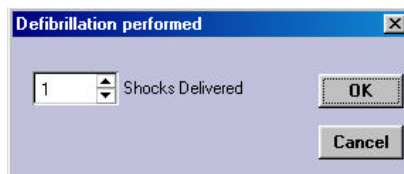
To add or edit events in a frame:



Click on the desired Event Button



Then click on the “Event field” of the frame that you want to edit



Edit the dialog that appears, and click on the OK button.
Some events do not have a dialog.



The programmed event will now appear in the "Event field" of the frame

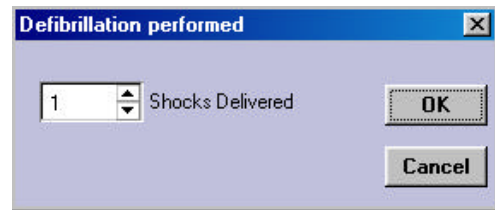
Available Events:

Defibrillation Performed

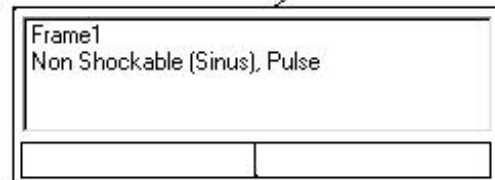
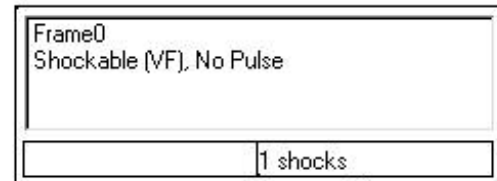


This function allows you to set an event when a certain number of shocks are given.

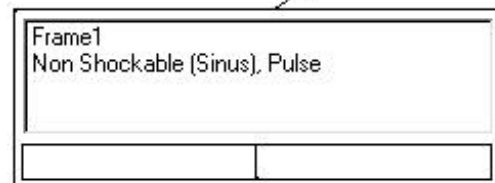
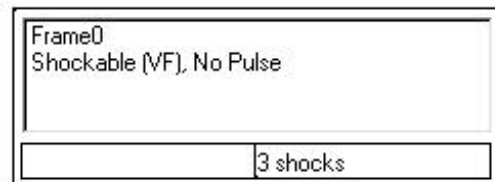
Number of shocks can be 1 to 9.



Example: Scenario proceeds to Frame1 and an non-shockable rhythm after 1 shock has been given.



Example: Scenario proceeds to Frame1 and an non-shockable rhythm after 3 shocks have been given.



Time Event



This function allows you to set events based on time (time in the current frame).

Time in this Frame is the time in seconds since the scenario entered this frame.

Range 0 – 250 seconds.

