The Clock Generator

The clock generator in MacBreadboard can operate in one of four modes.   The modes are selectable from the 'Clock' menu, and identifiable by a check mark in the menu and a unique picture on the trainer.   Typical frequencies generated are 10Hz and lower.

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Free-Run -
a continuous square wave signal is generated.

The frequency is adjustable by sliding the simulated control

right or left.

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Positive pulse -
In this mode, a button is shown in the clock

function area of the trainer.   Pressing the button causes a

clock 'pulse' to be generated.   The pulse is initially low, then

it goes high and finally it returns low again.   The frequency

is determined by the Free-Run clock's setting.   A step function

may be simulated by pressing and holding the mouse button.

When the button is released, the clock output returns to its

initial state.

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Negative pulse -
Similar to the positive pulse except that the

initial and final states of the clock are HIGH, not low.

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Step -
Or half pulse.   Clicking on the step button generates

a state change in the clock.   If it was HIGH, it is now LOW

and vice-versa.   (Holding the mouse button down has no effect

in step mode.)