


Q: What is the purpose of the little red question mark

First and foremost, let us say that the button with the little red question mark is your friend. To understand where the idea for it came from, let's discuss the issue of protecting ourselves from ourselves.

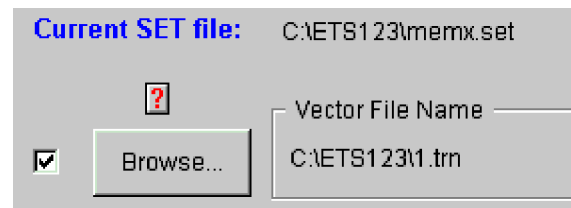
Under the **WindowsXP** File Manager you can move or copy files - differentiated by holding down the Shift key or the Ctrl key. Holding the wrong key can have disastrous effects. We know...been there, done that. We have also made rash clicking when saving set files under ETS2k. We lost a few vector files. That hurt. So we decided to do something about it.

There is the classic trade-off between efficiency and protection. We can make mistakes so let us make them fast; vs. being reminded *ad nauseam* whenever danger looms. Choosing the former is like driving without seat belts, although without the dire consequences of a mishap. Pop-up windows, warning you of a potential error you are about to make, are already plentiful to the point of annoyance. Indeed, we hold that we need no more, lest we become immune to its intended effect. Yet, something was needed to prevent us from accidentally overwriting a good vector file with bad data. So, having dispensed with the idea of another pop-up window, we came up with the little  button

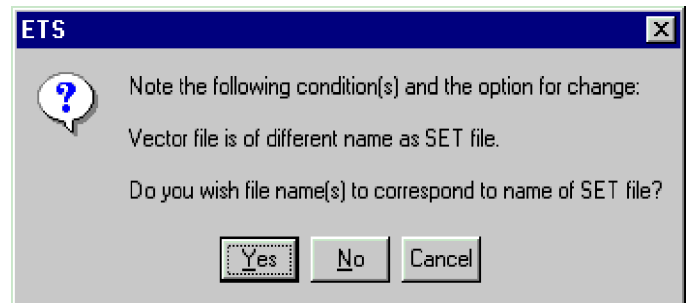
File Preservation

HiLevel SET files - containing all the test setup information for a particular device - employ pointers to vector, program, and comment files associated with that setup. A common scenario where the button comes

into play is the situation where the SET file created may not have the same filename as the vector file you translated (.TRN). The button appears when you either download vectors, or save or restore the SET file:



When you see the question mark, click the button to see why it's there:



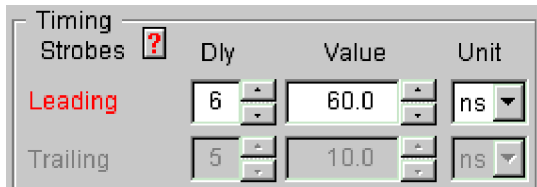
In this instance you are given the option to correct the filenames, but you don't have to. Just remember that the button will appear each time you do this function unless you answer 'Yes'.

Timing Issues

The little red question mark button also appears when certain timing violations exist. For example, you might set up your test with a 10MHz test rate and place a leading edge at 60ns, which is perfectly legal with a 100ns cycle. But if you increase the test rate to 20MHz, the cycle is now 50ns, so the little button appears, as you will see on the next page.

The Little Red Question Mark

(continued)



Just click the button to see what's wrong:



The software doesn't "correct" anything in these cases because it is impossible to know what the user would want to do about it. You might want to reduce the delay edge placement, or you might want to lower the test rate. If you use percent (%) as the unit, you would not see this button as the result of a test rate change. But you should select % as the unit *before* changing your test rate.

Expect the little red question mark button to find more uses. Think of it as your guardian angel as you develop tests and it will help you avoid mistakes.

Also see:

Q'nApp #E16: ETS2k Files

Q'nApp #E39: Removing the PRG attachment

Q'nApp #E44: Making test files portable