1006: Custom Configuration Files

The CT100B has many instrument settings which can influence the measurements: cable length, Vp, resolution, etc. The TDR has a feature that allows you to save and load these as configuration files. The use for this feature is to have custom configuration files for testing specific cables.

This application note will walk you through setting up and loading configuration files.

Setting up a Configuration

After your cable has been connected to the CT100B, we'll define a setup we wish to use for this configuration. The Cable Length is set to Short since we are using a test cable that is only three feet long. Use the M-FUNC button to display the Vp, and the M-FUNCTION knob to set it to 0.704. Press the orange AUTOFIT/HELP button and choose the AUTOFIT menu item. This will set the HORIZONTAL SCALE to a reasonable value and move the cursors to the beginning and end of the test cable. Press the Resolution menu item until Fixed mode is displayed. Use the M-FUNCTION knob to set the step size to its finest resolution of 0.76 picoseconds.



Save the Configuration File

Press the FILE button. Then press the Config Entries menu item.



This opens a dialog box listing all of your previously saved configurations. We can ignore them because we just want to make a new one. Press the Add New menu item and type in a name for your new configuration.

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Now using the software keyboard on the screen or a USB keyboard, give the new configuration a name.

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After pressing OK to save your configuration, you can use the Blue Button to back out of all of menus.

Load a Saved Configuration

At some future time, perhaps after other people have used the CT100B for other purposes, you can restore these settings just by loading the saved configuration.

Suppose that when you turned on the CT100B, the settings for the TDR are Long cable length, Screen resolution, a Vp of 0.652, the cursors have been moved to new positions and the horizontal scale has been changed.



You can use the File Load/Save menu item and then the Config Entries menu item to bring up the dialog box containing the saved configurations. Use the M-FUNCTION knob to scroll the highlight through the list to select the configuration that you want to load, and then press the Select menu item.

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All of the settings are applied immediately.



DEFAULT Configuration

Normally the state of the CT100B is preserved across power cycles. It will turn on in the state that it was last running. However, if you name a saved configuration DEFAULT, that configuration will be used each time the CT100B is powered on.