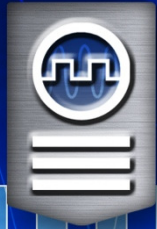




Timing Commander Installation

TSD Applications, IDT

v1.5 April, 2014



IDT

TIMING COMMANDER™

Get Command of Your Timing Tree

Installing Timing Commander

Timing Commander System Requirements:

- Windows XP SP3 or later.
- Processor: Minimum 1Ghz.
- Memory: Minimum 512MB, recommended 1GB.
- Available Disk Space: Min 600MB (1.5GB 64bit), recommended 1GB (2GB 64bit)
- Network access during installation if the .NET framework and SQL compact are not currently installed on the system.
- Windows Administrative permissions to install software.
- USB 2.0 interface. The evaluation board USB module is not compatible with USB 3.0. The hardware drivers are automatically installed during the Timing Commander installation.



Manufacturers will label the USB port with the appropriate label. However, sometimes the internal host controller may be USB 3.0 even if the port is labeled as USB 2.0



If internet access is **not available**, the following two items must be downloaded to a USB drive or burned to a CD and then installed onto the machine. If internet access is available, these will automatically be installed.

Microsoft .NET Framework 4 (Standalone Installer):

<http://www.microsoft.com/en-us/download/details.aspx?id=17718>

SQL Compact 4:

<http://www.microsoft.com/en-us/download/details.aspx?id=17876>



The Timing Commander installation requires the following two files:

- 1) TimingCommanderSetup.exe
- 2) <PersonalityFile>.tcp

The .exe file will install the Timing Commander software.

The ".tcp" file is the "Personality" file that contains the GUI for a specific device. For example, the file may be named "IDT8T79S818I-08_v0.6.tcp".



Attention: Download and save the Personality file to a directory with write access, such as the "Documents" folder. Timing Commander requires write permissions for the directory and the personality file. *Do not place in the "Programs" or "Windows" folders.*



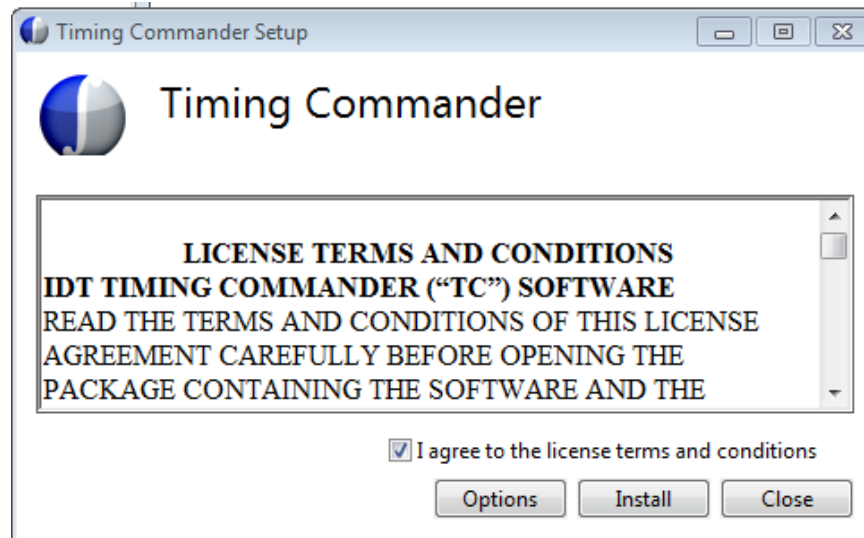
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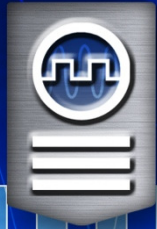
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Installing Timing Commander

1. Unzip the Timing Commander installation file.
2. Execute "TimingCommanderSetup.exe"
3. Accept the "Terms and Conditions" and press "Install".





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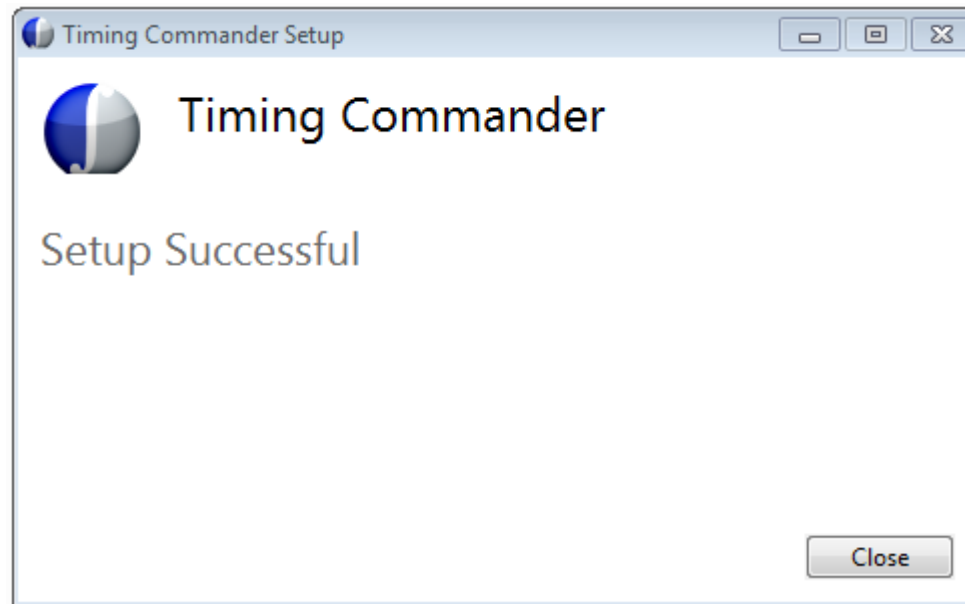
Installing Timing Commander

4. Timing Commander will automatically install the following:

- Timing Commander Framework
- USB hardware drivers
- Help files.
- Support for accessing SQL Compact databases
- A "Timing Commander" shortcut in the Window Programs
- Microsoft .NET Framework v4.0 (if not already installed).



After the installation, the "Setup Successful" message will be displayed.





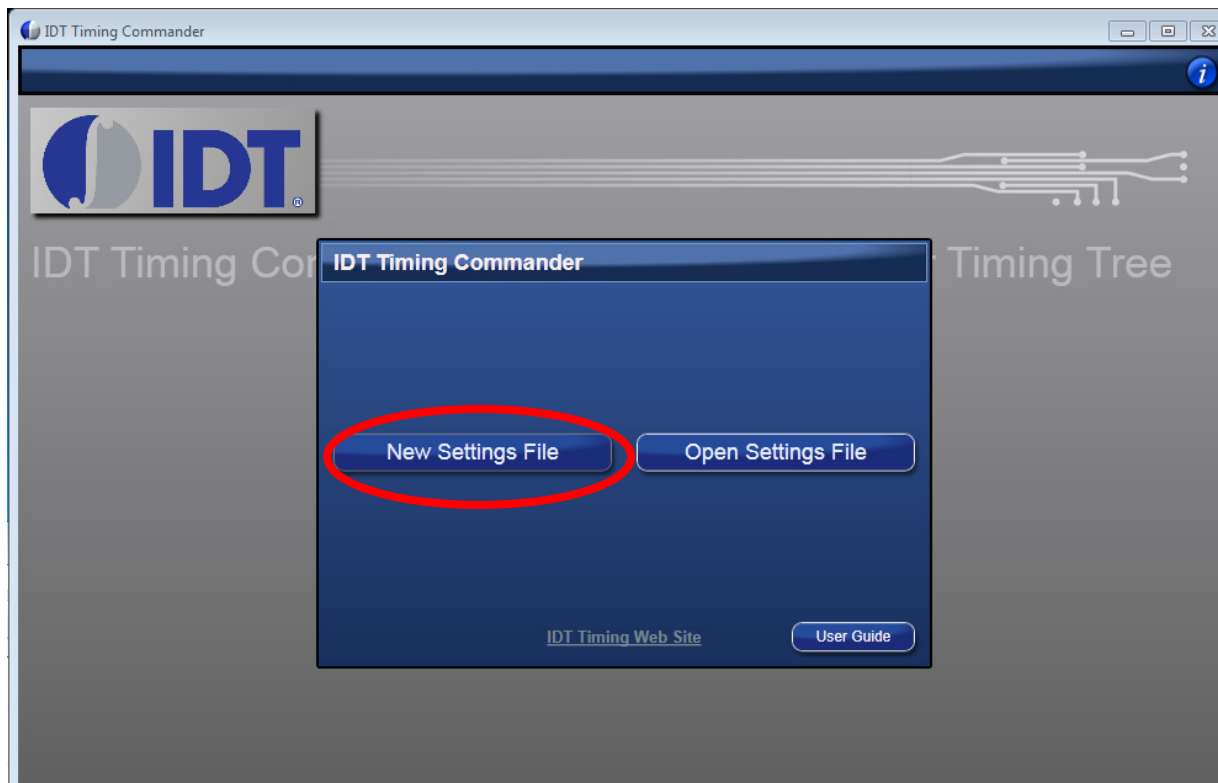
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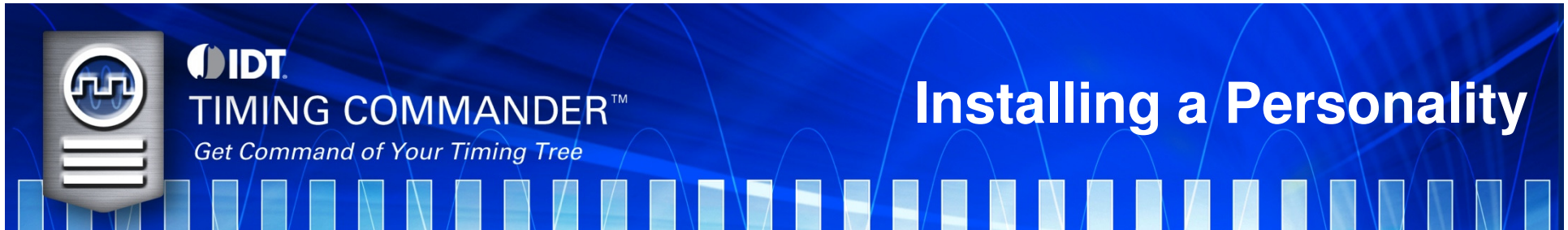
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Get Command of Your Timing Tree

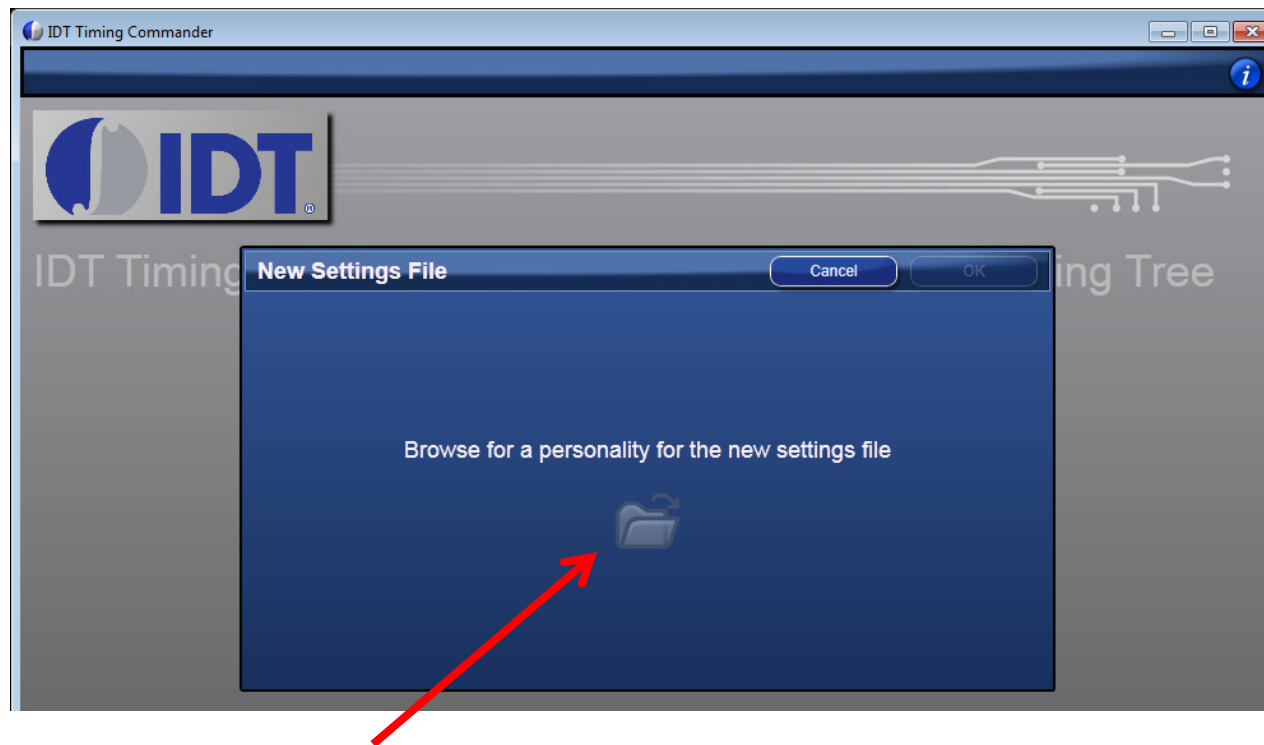
Running Timing Commander

- Go to Windows>Programs>IDT and click on "Timing Commander"
- On the first run, there will be two options, "New Settings File" and "Open Settings File". Select "New Settings File".

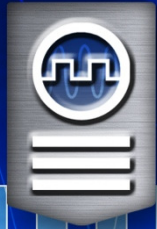




- The next screen will prompt for the "Personality" file.



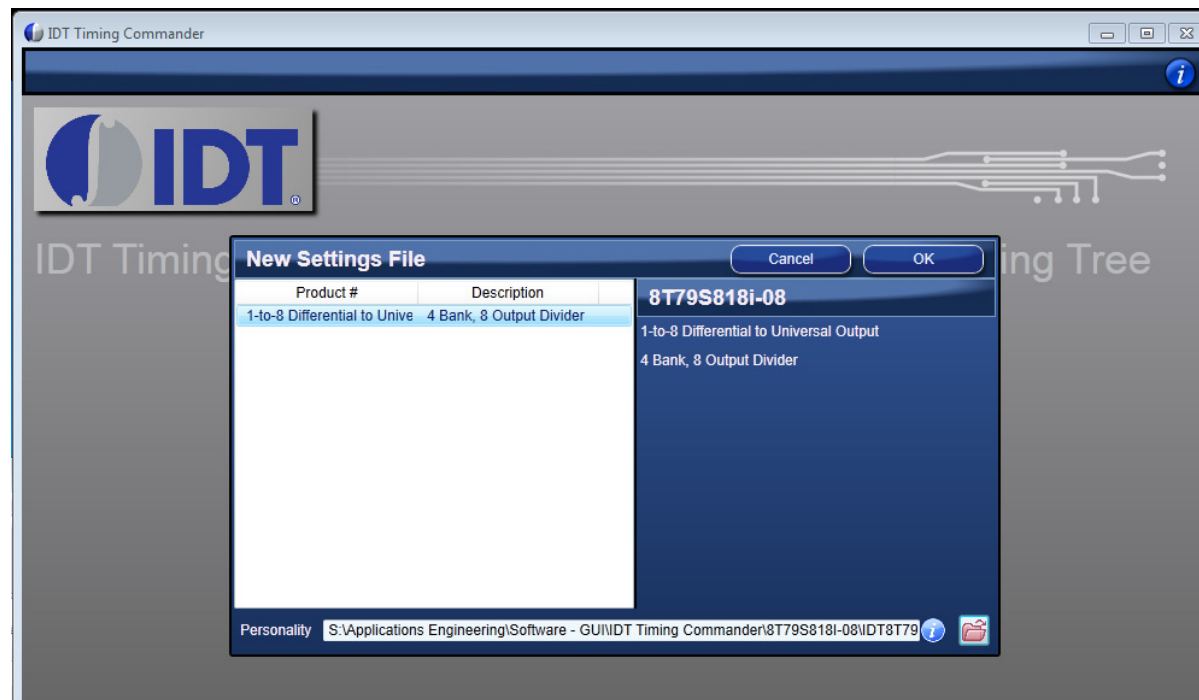
- Click on the small folder to browse for the ".tcp" file.
- Locate and select the ".tcp" file then press "Open".



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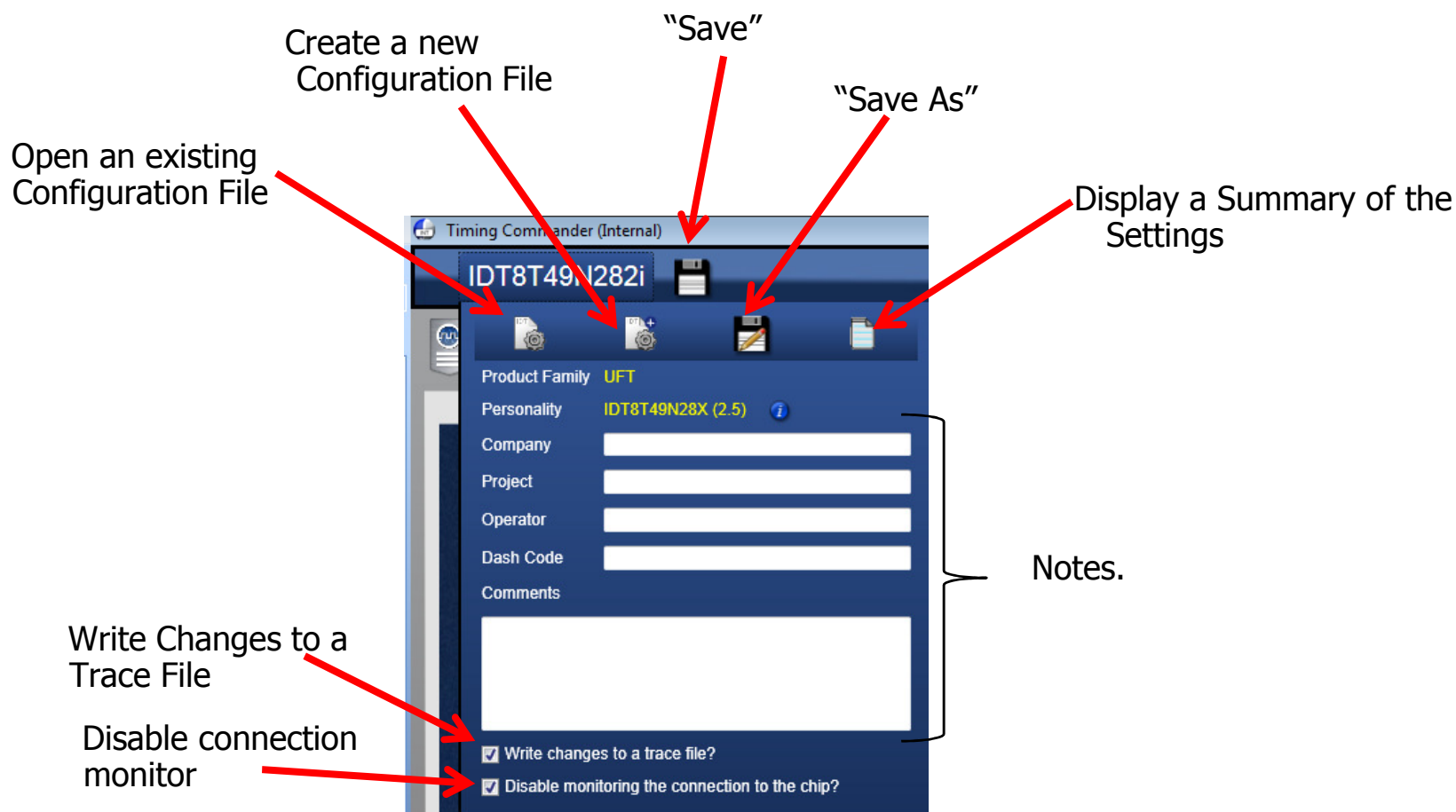
Installing a Personality

- The personality will now be listed under the "Product #" column. In the future, as more personalities are added, they will be visible in this location.
- Select the personality to load (only one available on first run).
- Press "OK" to load the GUI.





Click the Box containing the Personality Name on the top-left of the GUI to display the drop-down File utility dialogue.

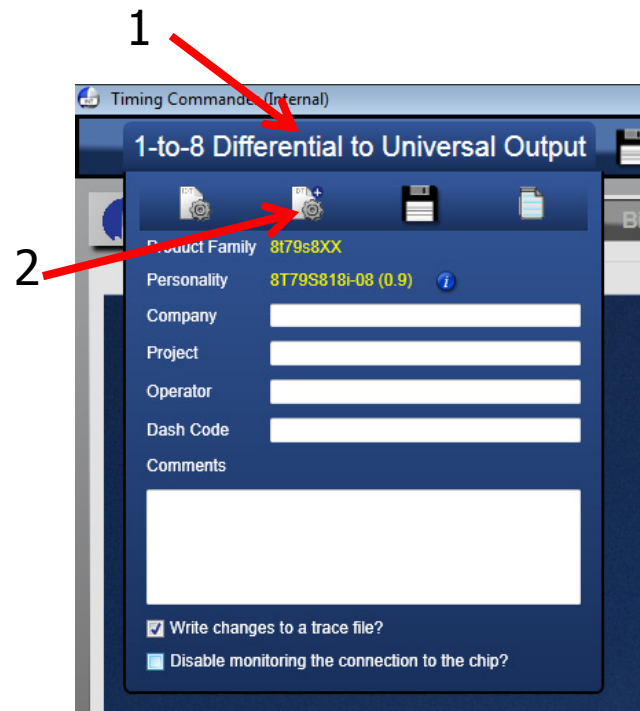




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Opening a Different Personality

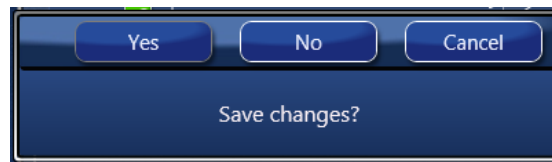
1. Click the Box containing the Personality Name on the top-left of the GUI.
2. Click the "New Settings File" button.



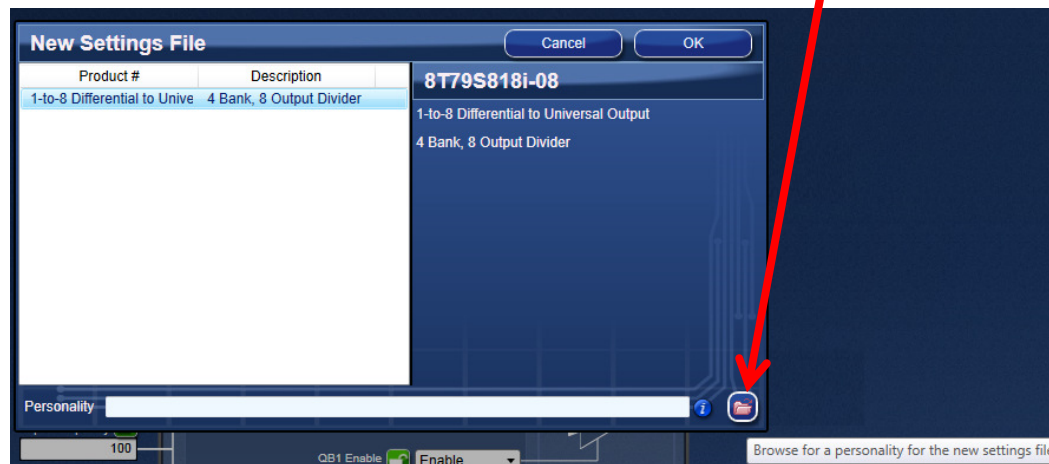
Opening a Different Personality

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3. A dialog window will ask to save the settings file changes. Click "Yes" or "No".

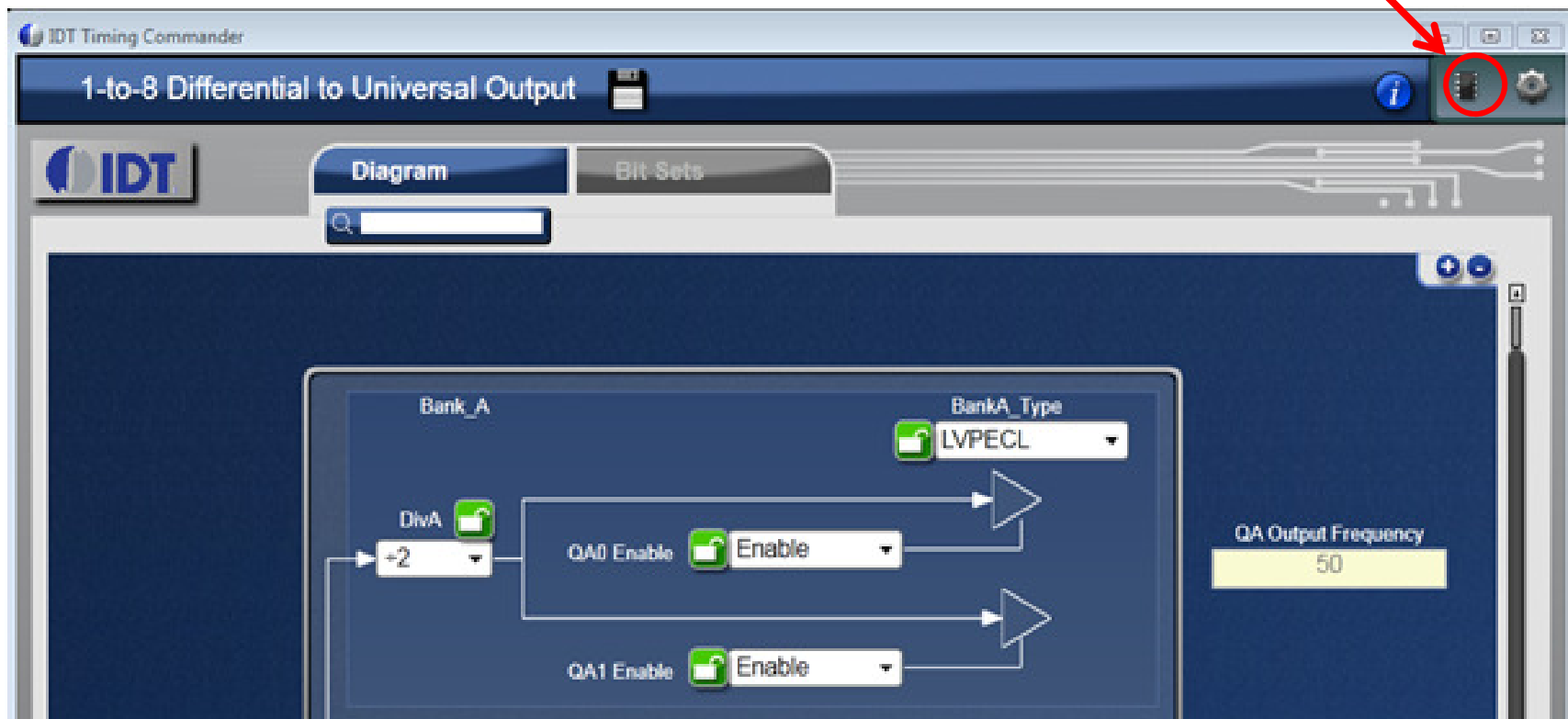


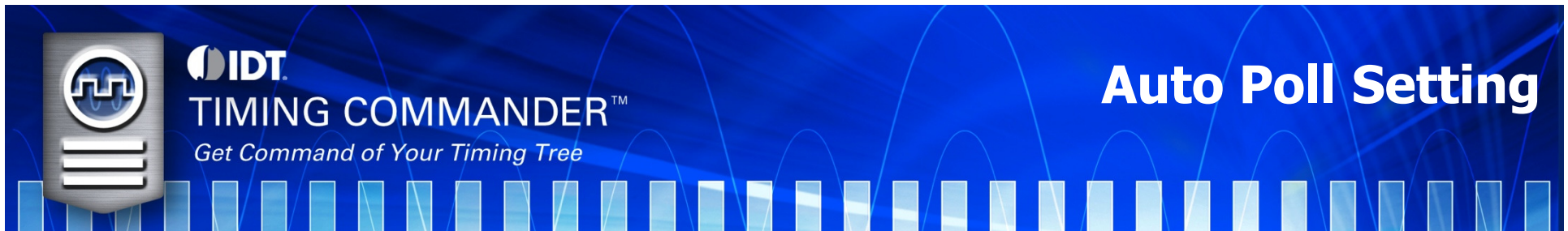
4. After saving the settings file, the following dialog window will pop up. Press the browse button, select the new personality, and load it.





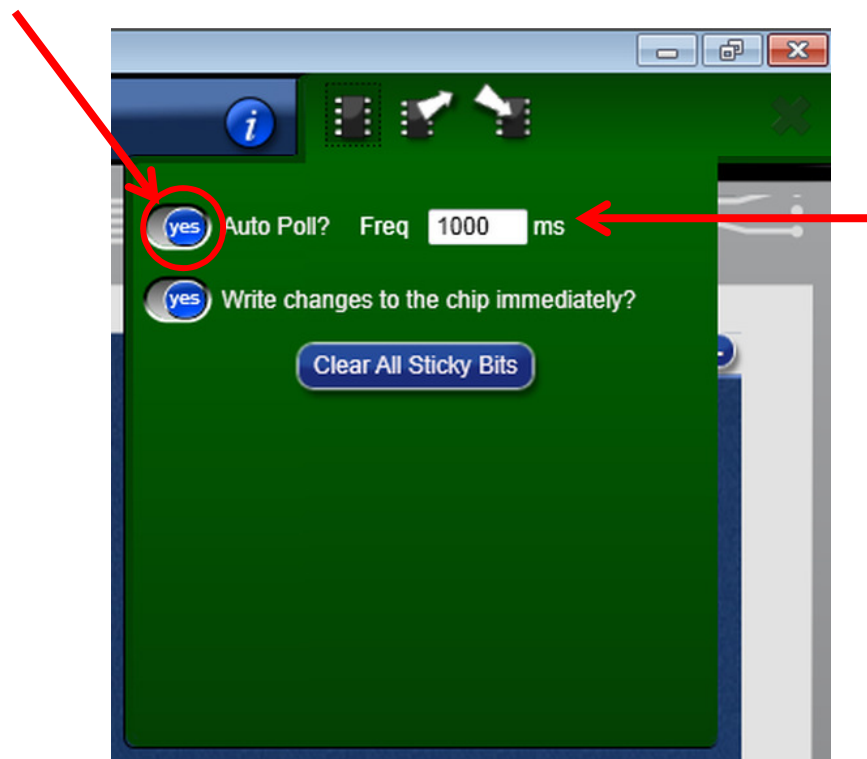
- Connect the Evaluation board to the PC with a USB cable.
- The final step necessary in order to communicate with the evaluation board is to click the "Connect Chip" button, at the top-right of the GUI.





Once connected, the "Auto Poll" setting can be accessed by clicking on the chip icon in the top-right of the GUI.

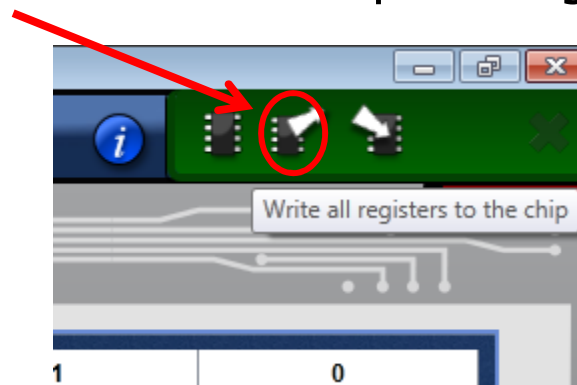
Auto Poll should be disabled when debugging the board. Press "Yes" to toggle the setting and thus disable it.



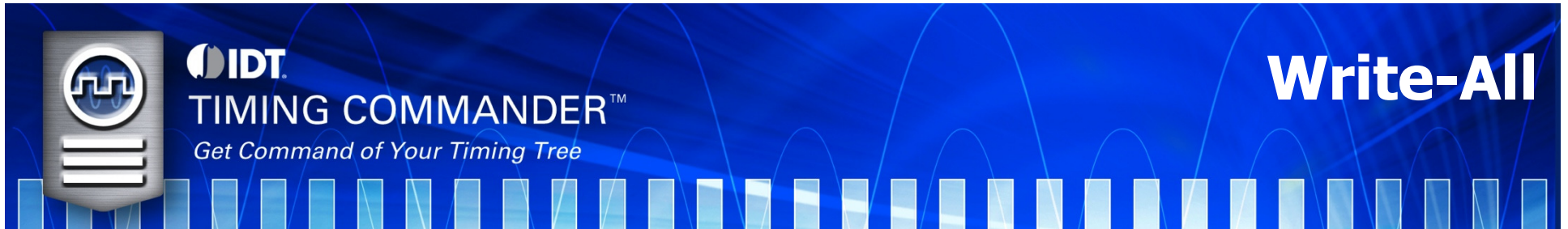
This setting sets the period for the auto-poll update. It is recommended to be ~1000ms or greater.



The "Read-All" button will read the registers from the device and load it into the GUI. Read-All should be used only after Write-All (next slide) has been issued to the chip at least once since powering up.

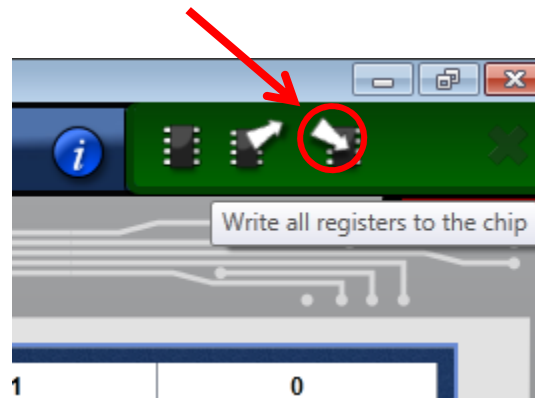


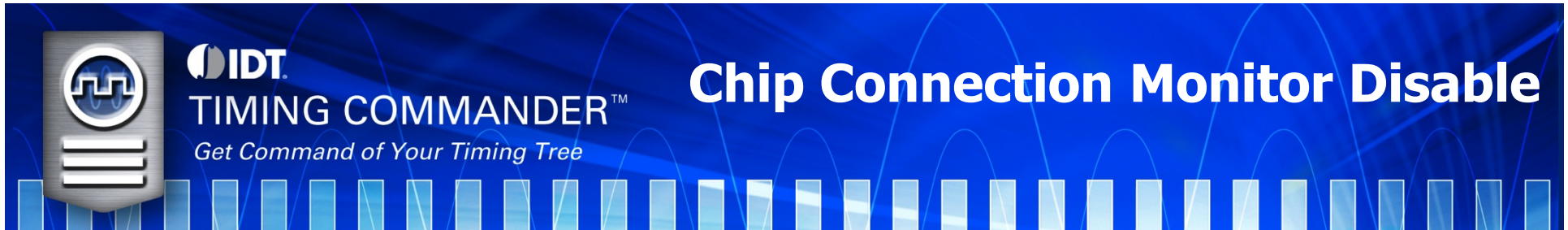
Do not use this button upon initial connection to the chip (without issuing a Write-All) as this will disable the auto-calculate function for the majority of the registers. Registers will be locked (see "Icons" slide for description). If the registers are locked due to a Read-All, initiate a new session (see "IDT TC User Guide.pdf" for more instructions).



Use the "Write-All" button to transfer the GUI settings to the device.

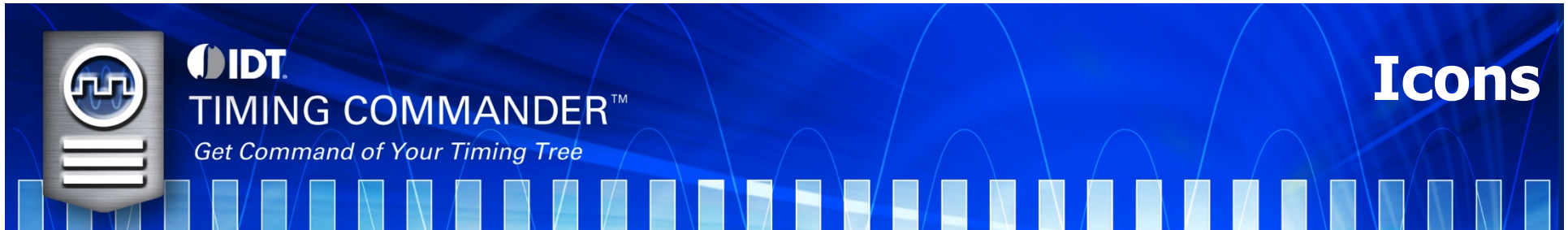
Note: Each time the chip writes, it'll read the data back to verify if the write was successful.





The Timing Commander GUI will monitor connectivity to the chip every second. To disable this (in case of checking performance or if cable is physically disconnected from the evaluation board), click on the personality label (in this case "IDT8T49N828I") on the top-left and then check the "Disable monitoring the connection to the chip" check box.





Icons Associated with Data Entry Boxes



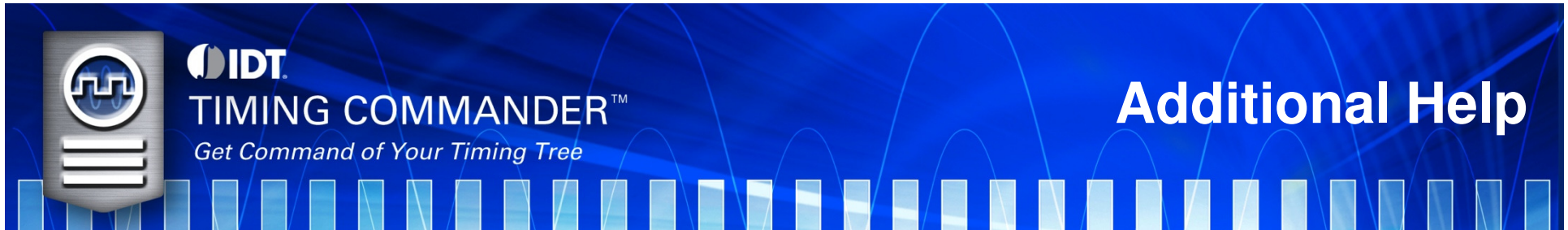
Unlocked

This icon will appear beside a data-entry field to indicate that the field is not locked by the user and is using the Default Value for the field as calculate by the personality for that device. The user may click on the icon itself to lock the field with its current value.

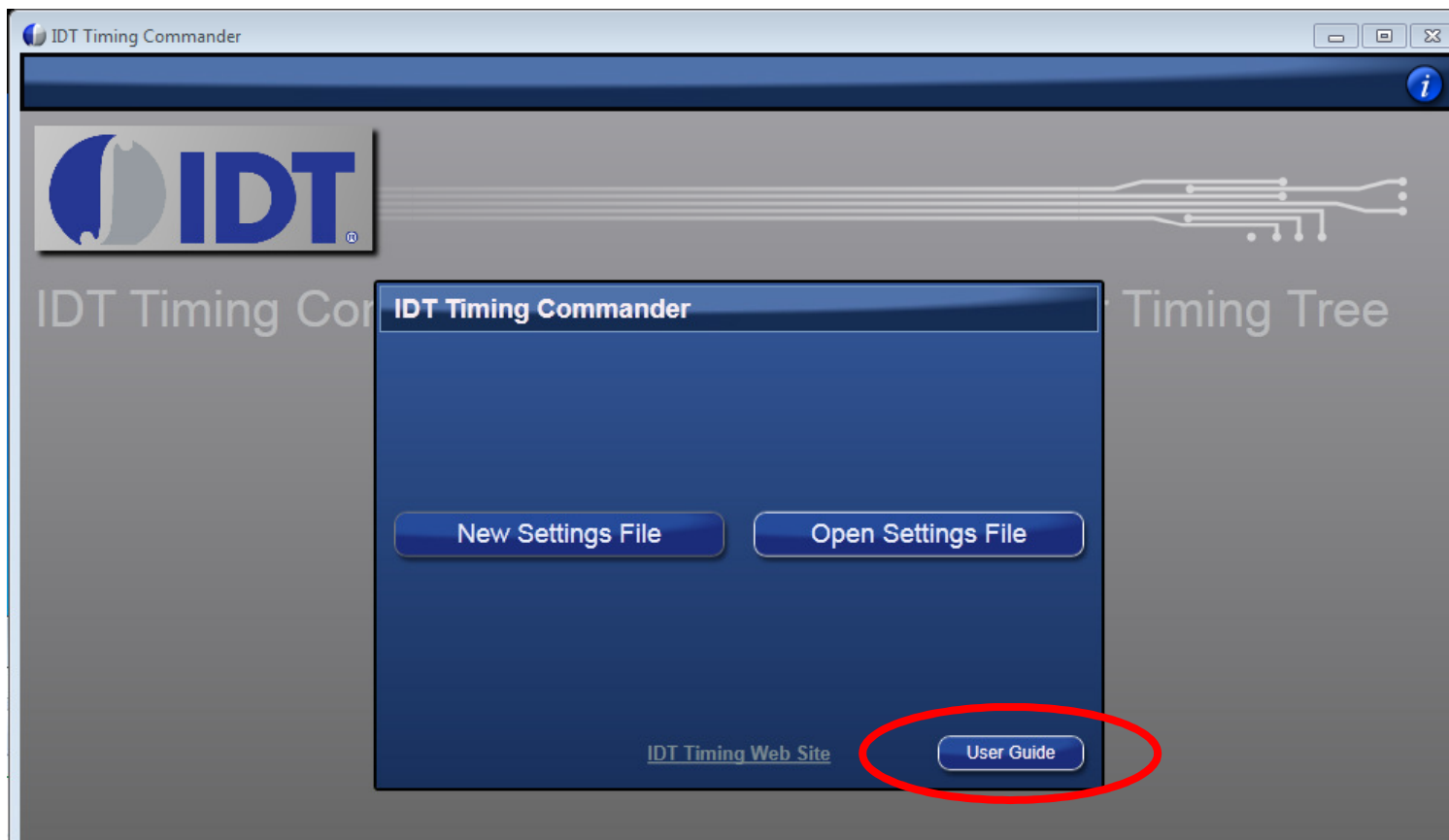
Locked



This icon will appear beside a data-entry field to indicate the field's value has been locked by the user. The field will become locked whenever the user enters a Value here that is different from the Default Value for the field or if they click on the Unlocked icon when the Default Value is present. Locking a field will prevent its Value from changing in reaction to other changes performed elsewhere in the device. Note that reading from a connected physical device will override a Lock for any bit sets read from the device.



- For additional Help, the User Guide is available by clicking “User Guide” on the start-up screen of Timing Commander.



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