

Getting Started with TDSVNM

You can use this side of the Quick Reference to start taking measurements with the TDSVNM CAN and LIN Timing and Protocol Decode software. The other side contains a complete menu tree for TDSVNM software.

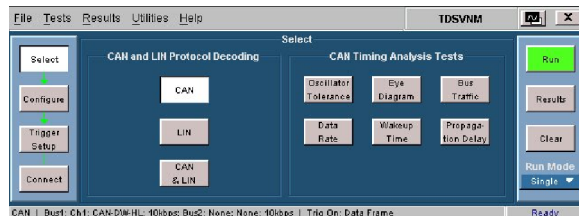
NOTE. For complete operating instructions and General Safety information, refer to the online help for the application.

The TDSVNM CAN and LIN Timing and Protocol Decode software and the ATM-1 Automotive Trigger Module transform a digital oscilloscope into an analysis tool to capture and decode CAN and LIN messages.

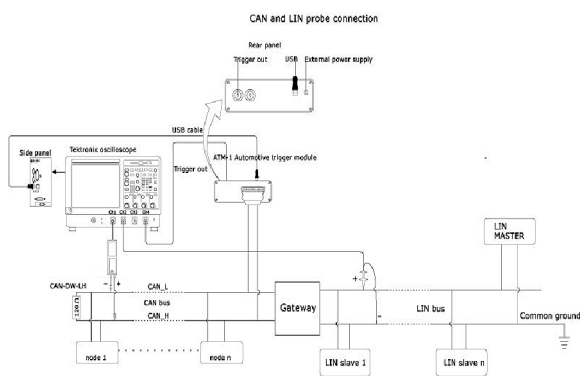
Decoding CAN and LIN Protocols

To decode the CAN and LIN messages, follow these steps:

1. Select File > Run Application > TDSVNM CAN and LIN Timing and Protocol Decode Software from the oscilloscope menu bar. (For supported 7000B-series oscilloscopes, on the oscilloscope menu bar, click App > TDSVNM CAN and LIN Timing and Protocol Decode Software).
2. Select Tests > Select from the application menu. Select CAN & LIN.



3. Connect the probes to the device under test as below.



For up-to-date information on Tektronix oscilloscope solutions for TDSVNM, access the www.tektronix.com/Masurement/scopes/ Web page.

TDSVNM Ordering Information

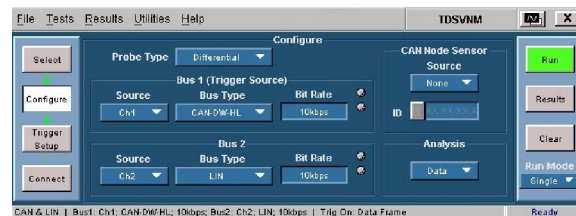
Supports the TDS5000B, TDS7054, TDS7104, and TDS7000B series oscilloscopes; refer to the *Optional Applications Software on Windows-Based Oscilloscopes Installation Manual* for a complete list of supported models. The applications CD includes a PDF file of the installation manual.

If you order the Option VNM along with a TDS5000B, TDS7054, TDS7104, or TDS7000B series oscilloscope, the TDSVNM Timing and Protocol Decode Software will already be installed and enabled.

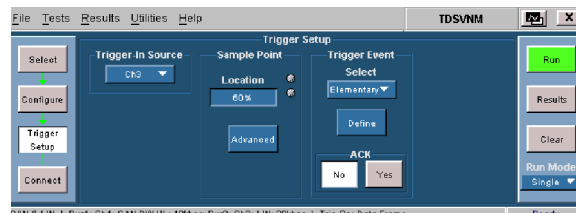
To order the ATM-1 Automotive Trigger Module, contact a Tektronix representative.

4. Select Tests > Configure from the application menu. Set the Probe Type to Differential and set the Bus 1 (Trigger Source) parameters.

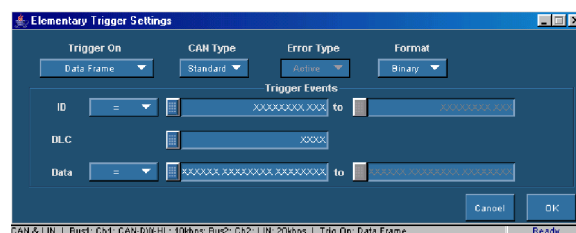
- Set Source to Ch1, Bus Type to CAN-DW-LH, and Bit Rate to the bit rate of the selected bus type.
- Set the Bus 2 parameters. Set Source to Ch2, Bus Type to LIN, and Bit Rate to the bit rate of the selected bus type.
- Set the CAN Node Sensor to None and set Analysis to Data.



5. Select Tests > Trigger Setup from the application menu. Set the Trigger-In source and the Sample Point Location as appropriate. Set the Trigger Event to Elementary.

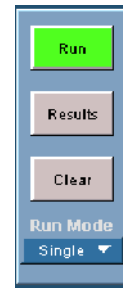


6. Click Define to define the trigger settings. Define the trigger settings and click OK. The ATM-1 Automotive Trigger Module is required to define the trigger events.

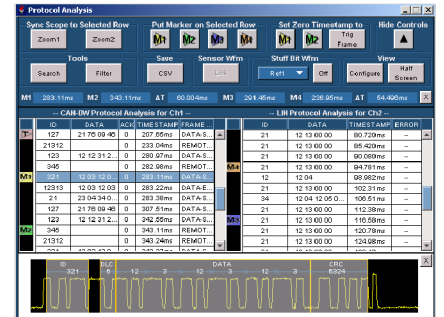


7. Set ACK to No.

8. Push the Run button to start taking measurements. When the measurement is completed successfully, the application automatically displays the results. You can also view the results by selecting Results > Details from the application menu bar.



9. The application displays results for the measurement.



To order an upgrade for an existing oscilloscope:

- Opt. VNM - TDS5BUP
- Opt. VNM - TDS7UP
- Opt. VNM - TDS7BUP

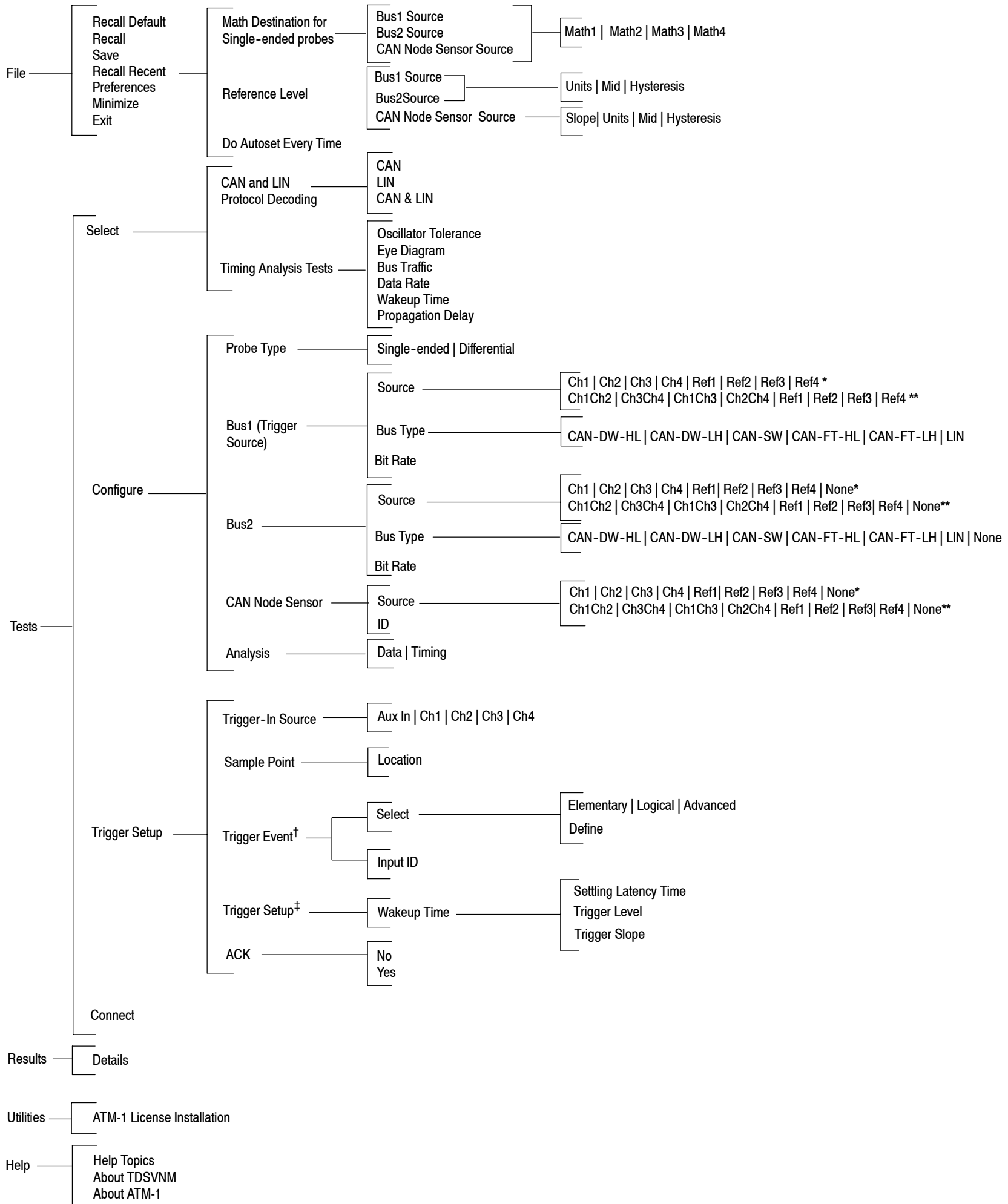
Recommended Products and Accessories

- Opt. 3M for TDS5000B
- Opt. 18 for TDS5000B
- Opt. 2M or 3M for TDS7054/7104
- Opt. 2M or 3M or 4M or 5M for TDS7000B series
- TCA-1MEG probe adapter, while using with TDS7000B
- P5205, P5210, P5200 and ADA400A differential probes

**TDSVNM CAN and LIN
Timing and Protocol Decode Software
Reference**



TDSVNM Menu Tree



* Displayed when the Probe Type is Differential.

** Displayed when the Probe Type is Single-ended.

† Available only for protocol decoding.

‡ Available only for Wakeup Time test.