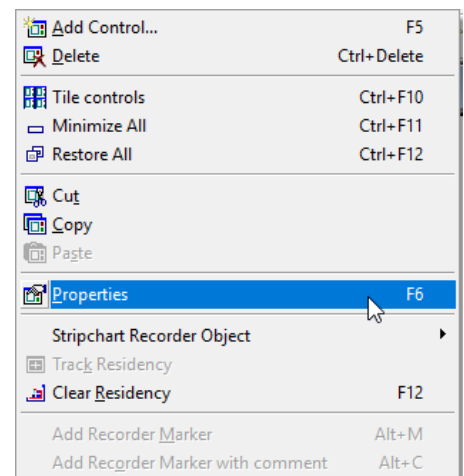


Streaming Data Directly to Disk

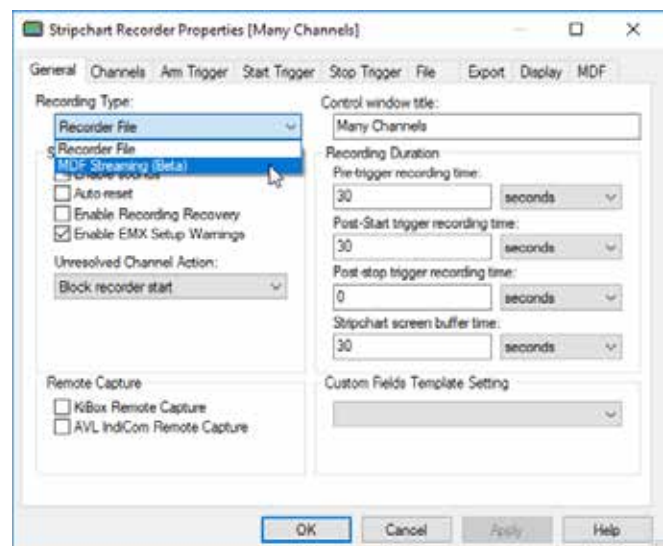
Advancements in ECU interface technology has provided the ability to acquire thousands of parameters at ever increasing rates. This has exponentially increased the size of the data sets to the point where it becomes impractical to store it all in RAM. To address this issue, VISION can stream data directly to disk as MDF4 files. The MDF format is widely used in the industry, making the data easily accessible in VISION Tool Suite or any other application that can read ASAM MDF4 files.

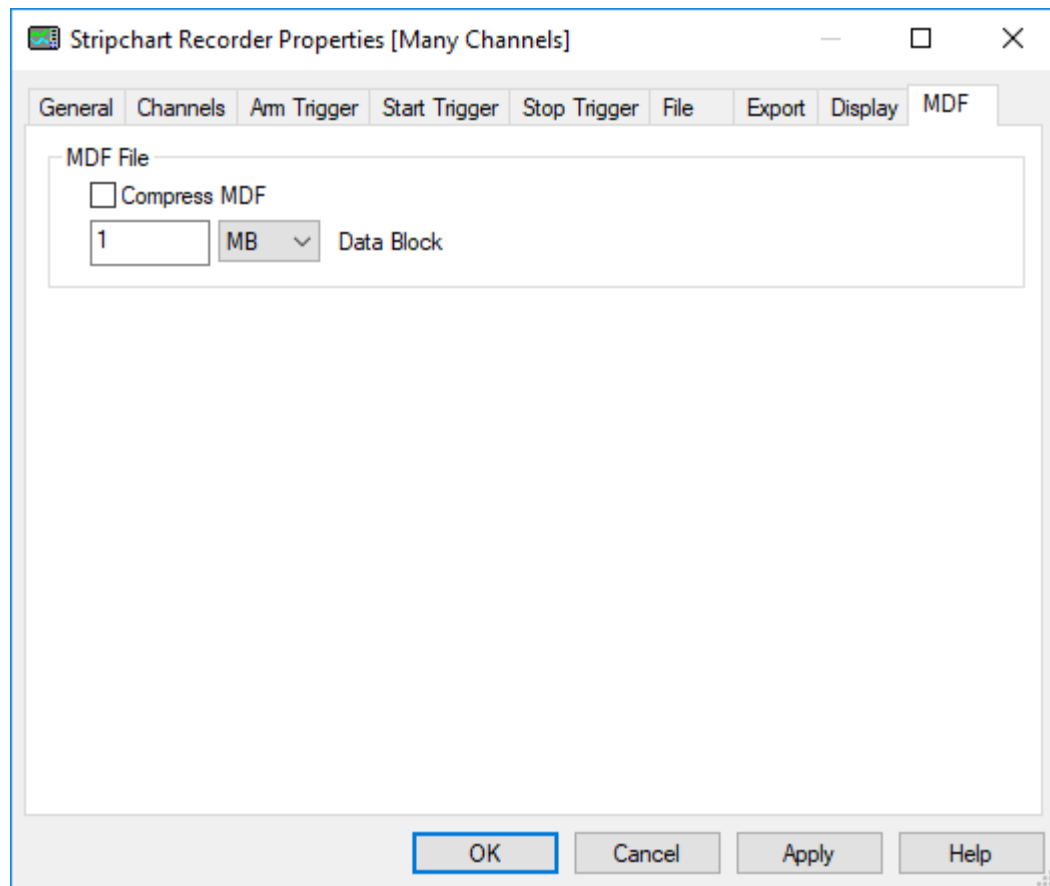
***The following applies to VISION 5.2.1 and older**

To switch Recording Type, open the Properties under “Screen Objects” and select “Properties”.



Select “MDF Streaming (Beta)” from the recording type drop down list.





The MDF tab settings controls how the Stripchart saves the streaming data to the computers hard drive when “Recording Type” is set to MDF Streaming in the “Stripchart properties ‘General’ tab.

MDF File Group

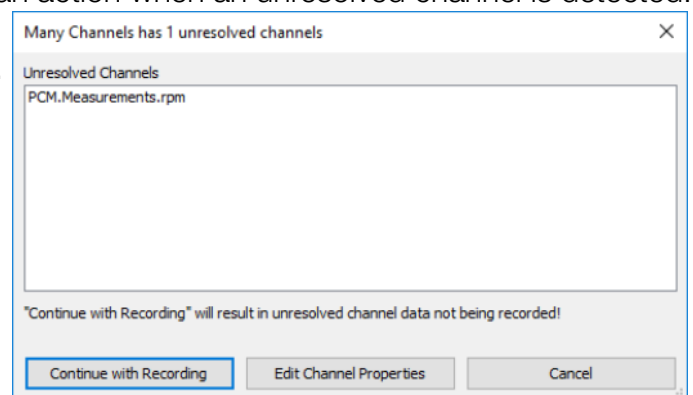
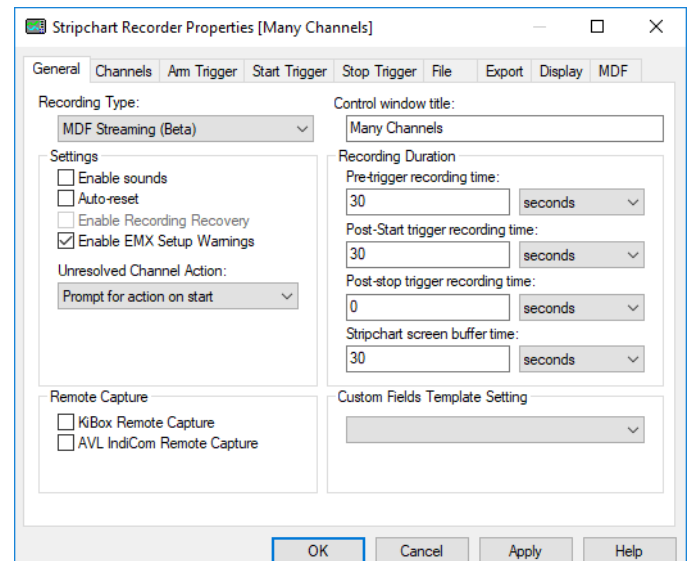
- **Compress MDF:** Enabling this option will compress the file as it is streaming and being saved to the hard drive. This may affect system performance as the file is processed through a compression algorithm during the saving process.
- **Data Block Field:** * Enter a whole number for the storage size of the file data blocks.
- **Data Block Size Drop-down:** * Defines the file data block storage size to be either Kilobits or Megabytes.

Other Recorder Settings

Control window title: Enter the name of the Recorder/Stripchart Object. Name appears in the object title bar.

Settings Group

- **Enable sounds:** Enable sound for start/stop trigger conditions. Refer to section “Enable Recorder Sounds” for enabling sounds in VISION.
- **Auto-reset:** Enables automatic reset after a logging session has completed. When used with Auto-arm, it enables the use of logging sequences.
- **Enable Recording Recovery:** Controls how VISION stores recorded data. Option is available only when the “Recording Type” setting is configured to ‘Recorder File.’
 - **Enabled:** VISION initiates a Windows service to buffer memory and open a file and then streams the data to this file as it is recorded. This reduces the need for Windows Virtual Memory preserves the data in case of any interruption of data collection. Data can be recovered from this file the next time VISION is started.
 - **Disabled:** VISION will immediately collect data for the recorder in Virtual Memory. After the recording is complete, the data is then saved to a file
- **Enable EMX Setup Warnings:** Functions only when an ATI EMX Data Acquisition Module is added to the VISION Device Tree. Enables or disables Recorder warnings that may occur from a combination of EMX filtering and StopBand frequency settings and the recorder sample rate setting that may cause data inaccuracies or aliasing. If Enabled, VISION will display a Channel Setting Warnings dialog when a possible problematic combination is found and suggests changes. To adjust the frequency of the Recorder Warning, go to the “Tools -> Options” drop-down menu and select the Recorder/Stripchart Recorder tab.
- **Unresolved Channel Action:** Select an option for handling situations when unresolved channels are detected within the Stripchart Recorder. Options are:
 - **Block recorder start:** Prevents the recorder from starting when unresolved channels are present in the project.
 - **Prompt for action on start:** Prompts user for an action when an unresolved channel is detected.
 - **Continue with recording:** Continues recording, disregarding unresolved channels.
 - **Edit Channel Properties:** Opens the “Recorder Properties Channels Tab” to edit unresolved channels. Recording will have to be manually started.
 - **Cancel:** Cancels the recording.
 - **Record anyway:** Disregards the situation of unresolved channels and starts the recording.



Recording Duration Group: Each time option is configurable with its own time unit. Unit options are: milliseconds, seconds, minutes, or hours.

- **Pre-trigger recording time:** Defines how much data to keep prior to the start trigger condition. When set to zero and Arm is clicked, the recorder will start by a trigger event or manually triggered.
- **Post-Start trigger recording time:** Specifies the maximum recording time after the trigger event. After the specified time has passed, the Recorder stops recording data.
- **Post-Stop trigger recording time:** Record additional data at the end of the post trigger time or after a stop trigger.

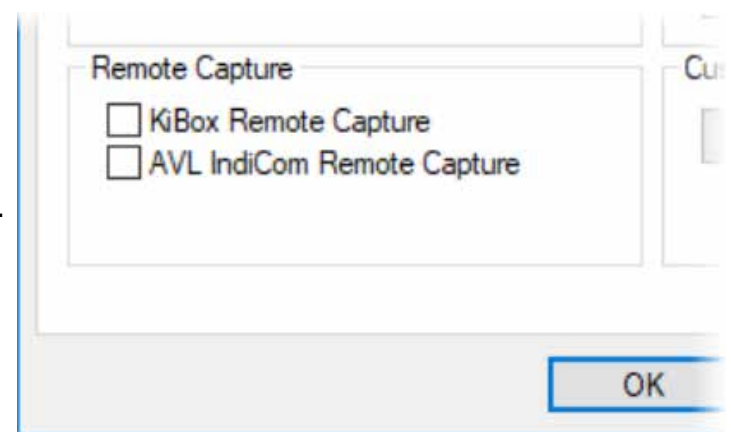
Note: Setting are disabled when stopping the recording manually or a stop trigger condition is not met.

Custom Fields Template Setting: Select the drop-down to set a user defined custom template that contains user defined fields containing macros and information displayed in the Stripcharts “Realtime tab -> Custom Fields sub-tab.”

The following group and options are displayed in the lower left corner of the “General” tab window based on the Tool kit license applied to the VISION application.

Remote Capture Group: This enables simultaneous triggering between the VISION recorder and combustion indication system selected. This allows to correlate the data between VISION and the combustion indication device better.

- **KiBox Remote Capture:** Triggers the Kistler’s Cockpit Software to remotely capture data from the KiBox when a recording is initiated within VISION (requires a valid Interface Toolkit for the Kistler KiBox). Pressure and other high speed data is not made available by Kistler as real time data items, but the resulting Cockpit software recording can be imported into VISION. For more information, see section “Kistler KiBox” of the ‘ATI’s Third Party Hardware User Manual’ included with the VISION download or on the ATI’s Support Portal at [www. accuratetechnologies.com/support](http://www accuratetechnologies.com/support).
- **AVL IndiCom Remote Capture:** Signals the AVL IndiCOM to start a high speed pressure trace capture when that recorder is started manually or by start trigger.



*Remote capture requires VISION toolkit 152-0032 VISION Kistler KiBox Data Acquisition Toolkit or 152-0035 VISION AVL IndiCom data acquisition toolkit

For additional questions, contact ATI support at support@accuratetechnologies.com.

Contact ATI Sales at : sales@accuratetechnologies.com

US +00 (1) 248 848 9200 / **China** +86 138 1023 6357 / **France** +33 (0) 1 72 76 26 10 / **Germany** +49 (0) 89 9700 7121
India +91 80 41 69 42 18 / **Japan** +81 3 6276 8950 / **Sweden** +46 (0) 31 773 7140 / **UK** +44 (0) 1767 652 340