2704 Paldan Dr
Auburn Hills, MI 48326
248-475-9880
sales@orionmeas.com

Manual Covers:

- AVT Diag Tool (v5.0.1.0)

Reference:

- OMS AVT-425 Datasheet.pdf
- AVT-425 v5.0.0.x Users Manual.pdf
- AVT-425 v5.0.0.x Supplemental Manual Set User Params

Revision Control

Rev Date	Rev	Updated by	Description
07/15/2024	A	Don Davis	Release

Table of Contents

1   Overview

The AVT Diag Tool (ADT) Application is developed to work with the OMS AVT-425 to help with development efforts and understand the OMS AVT-425 protocol detailed in the AVT-425 User's Manual
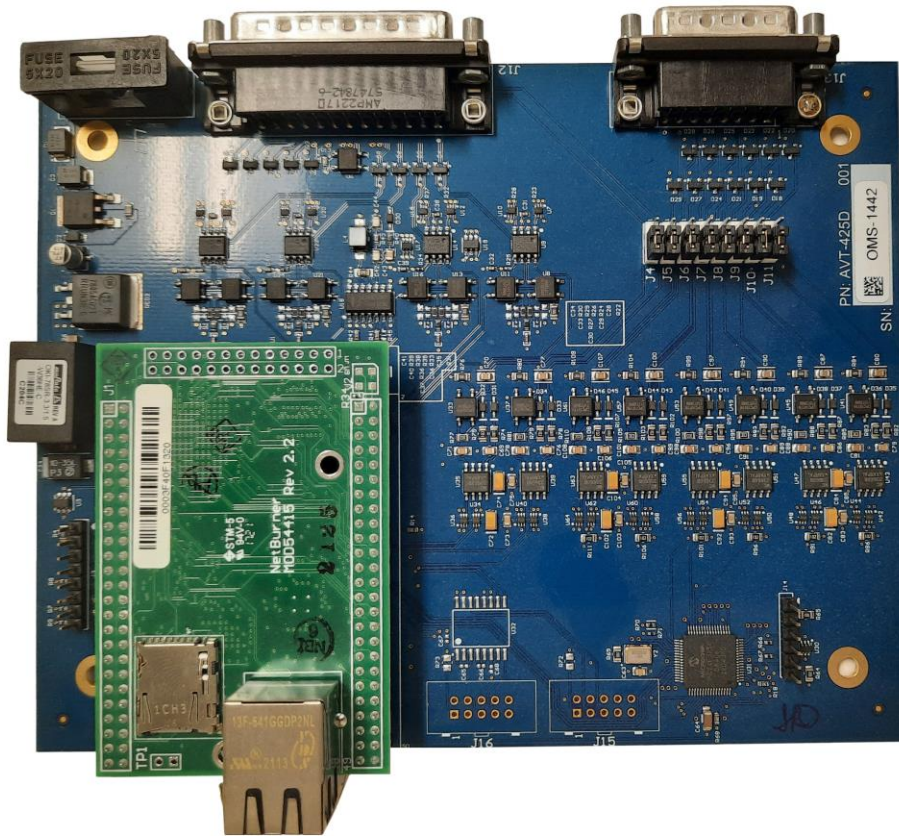
OMS AVT-425

1.1   Acronyms used in this Document

ADT: AVT Diag Tool

BRS: Bit Rate Switch. Part of CAN-FD format. Signals that the data portion of the CAN frame uses the data portion bit rate.

EDL or **FDF:** Generally meaning it may have a larger data payload than a Classical-CAN frame. Part of CAN-FD. Signals that the CAN frame is "FD" formatted

BIN: Binary Format

CAN: Controller Area Network

CRLF: Carriage Return Line Feed. (0x0D 0x0A)

DWN: A text file with the extension of .DWN that contains AVT-425 protocol commands that have been set up to use with the ADT application.

IEEE 754 Float: Institute of Electrical and Electronics Engineers technical standard for floating-point arithmetic.

ISO15765: International Standard. Road vehicles - Diagnostic communication over Controller Area Network (DoCAN).

LIN: Local Interconnect Network

PCB: Printed Circuit Board

SWC: Single Wire CAN

1.2   Software

The AVT Diag Tool Application software is written in VB.NET 2017 and is a multi-Threaded 64-Bit Application

2   Installation

Run the Setup AVT Diag Tool x64 v5.0.x.0.msi file to install the application and follow the instructions on the screen. By default, the application installs to the folder: C:\Program Files\Orion Measurement Solutions\AVT Diag Tool. There is an OMS AVT Diag Tool icon created on the desktop.

Multiple ADT applications can be run at the same time, each one can be connected to a different AVT-425 or to the same AVT-425 if using different IP Ports of the four available (10001-10004).

The Default IP Address that the ADT uses is 192.168.1.70. This is the Default IP Address set for the OMS AVT-425 PCB when shipped.

Once the IP Address is changed in the ADT it is saved on exit of the application. If multiple ADTs are run the IP Address for the first instance is the saved IP address, the others are reverted to the Default 192.168.1.70.

3   Graphic User Interface (GUI)

The ADT application defaults to show the 'Test' tab when executing the program. The following are the tabs:

- Test (default main screen)
- Configuration
- Application Log
- About

3.1 Controls

3.1.1 Sliders

The Test Screen can be customized. There are sliders that can be moved to create more space for a given control. These settings are remembered on application exit.
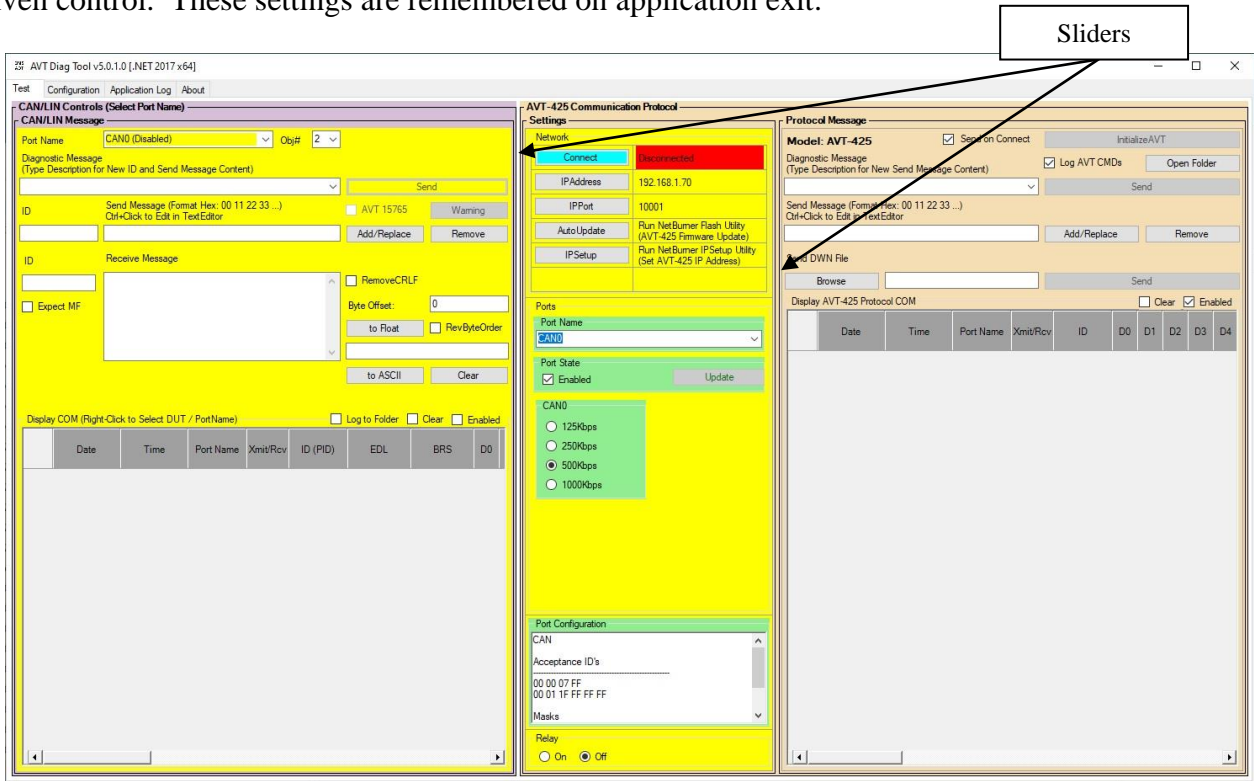
3.1.2 Select/Un-Select All

Shift+Left-Click Popup menu items to select or un-select all items.
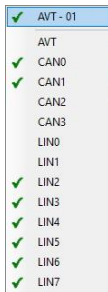
3.1.3   Spreadsheet View Ports

The Display COM spreadsheet and Display AVT-425 Protocol COM spreadsheet can be separated in multiple view ports and allows sections of the spreadsheet to be viewed. This helps in debug efforts to allow different cell locations to be seen at the same time.
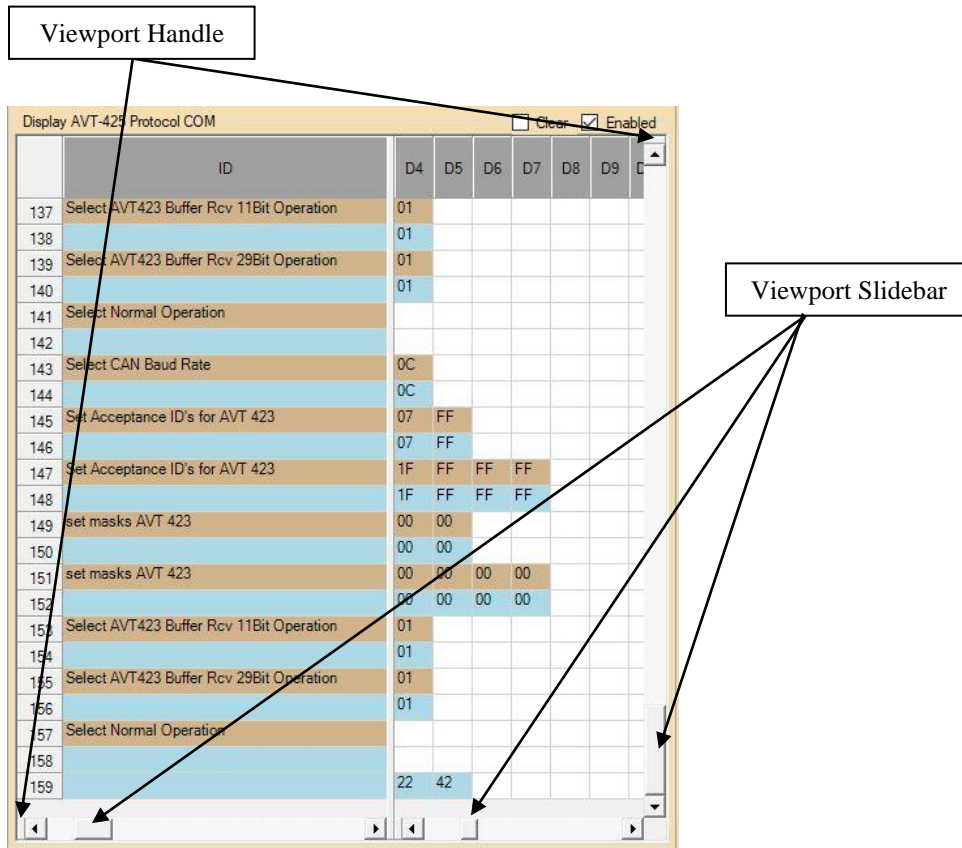
3.1.3.1   Create Viewport

To create a viewport left-Click, hold, and drag the viewport handle.

3.1.3.2   Remove Viewport

To remove a viewport double-Click the viewport handle.

4   Test

The Test tab is displayed when the ADT application starts.
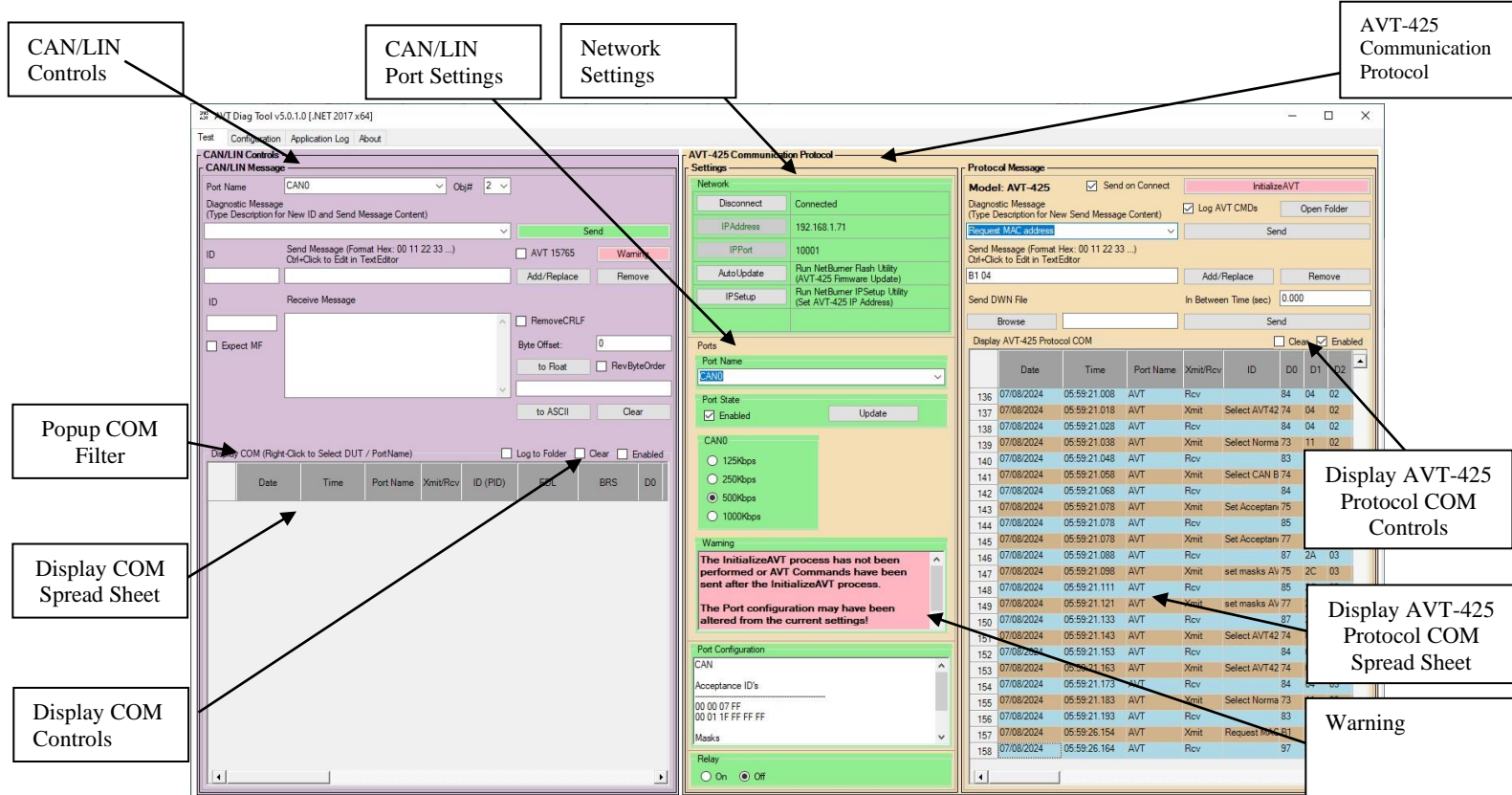
The screen is split into 2 controls:

- AVT-425 Communication Protocol (Right Side)
- CAN/LIN Controls (Left Side)

4.1   AVT-425 Communication Protocol

The 'AVT-425 Communication Protocol' control has the following groups:

- Settings
- Protocol Message

4.1.1   Settings

The 'Settings' group displays Network and Port settings and has the following controls:

- Network
- Ports
- Warning
- Port Configuration
- Relay

4.1.1.1 Network

The 'Network' group displays network information and has the following controls for the AVT-425:

- Connect/Disconnect
- IPAddress
- IPPort
- Auto Update
- IPSetup

4.1.1.1.1 Connect/Disconnect

The 'Connect/Disconnect' control displays the current state of the TCP/IP connection to the AVT-425 device.

4.1.1.1.1.1 Disconnected

When the ADT application starts or when the network is disconnected, 'Disconnected' is displayed for the network status and the background color of 'Settings' and the 'CAN/LIN Message' group of 'CAN/LIN Controls' is yellow. All controls that send and receive messages are disabled.

4.1.1.1.1.2 Connect

Select the Connect button to attempt to connect to the AVT-425 using the IP Address and IP Port specified. 'Connecting' is displayed during the connection process.

4.1.1.1.1.2.1 Connection is established

Once a connection is established, 'Connected' is displayed for the network status and the background color of 'Settings' and the 'CAN/LIN Message' group of 'CAN/LIN Controls' is green. All controls that send and receive messages are enabled.

4.1.1.1.1.2.2 Network Error

If a connection fails, a 'Network Error!' dialog displays and indicates the reason for the failure.
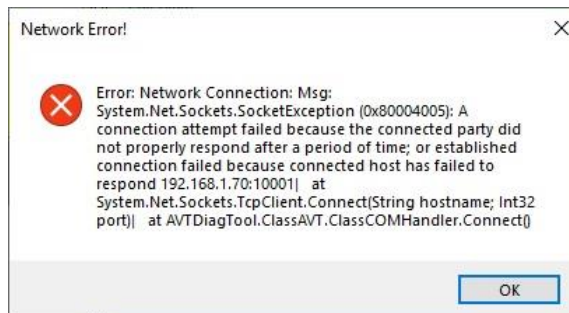
Note: If a connection fails it can take some time for the failure to occur.

4.1.1.1.2 IPAddress

The 'IPAddress' control displays the current IPAddress of the TCP/IP connection that is used to connect to the AVT-425 device. The IPAddress button displays the 'Enter IP Address' dialog box and allows selection of the IP Address to use to make the TCP/IP connection.
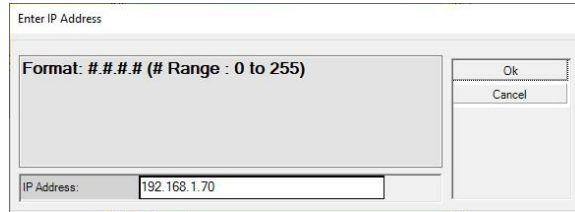
4.1.1.1.3   IPPort

The 'IPPort' control displays the current IPPort of the TCP/IP connection that is used to connect to the AVT-425 device. The IPPort button displays the 'Enter IP Port' dialog box and allows selection of the IP Port to use to make the TCP/IP connection.
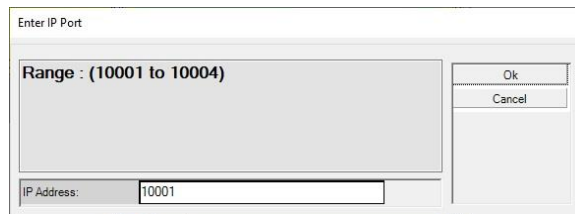
4.1.1.1.4   Auto Update

The 'Auto Update' control provides access to the NetBurner Flash utility that updates the AVT-425 firmware. The Auto Update button displays the AutoUpdate dialog that allows selection of the IP Address and the Filename of the firmware that is used to flash the AVT-425.
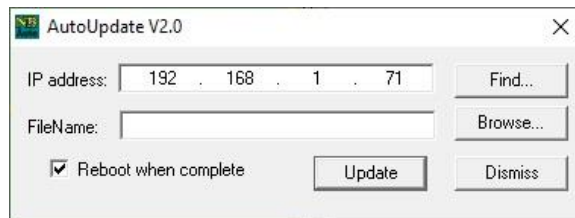
4.1.1.1.5   IP Setup

The 'IP Setup' control provides access to the NetBurner OMS IP Setup utility that updates the Network port settings of an AVT-425. The IP Setup button displays the NetBurner OMS IP Setup dialog that allows selection of the IP Address, Network Mask, Gateway, DNS, and Baudrate for the specified AVT-425 device.
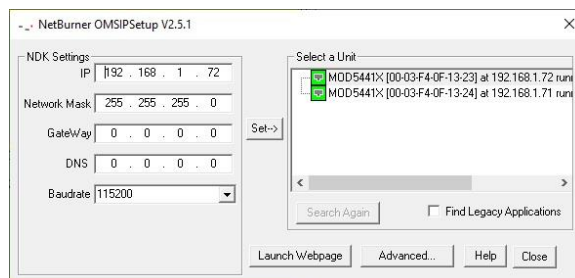
4.1.1.1.6   Ports

The 'Ports' group displays information for the CAN and LIN ports of the AVT-425. These settings are used when the InitializeAVT button is selected. The 'Port' Group has the following controls:

- Port Name
- Port State
- Port Baudrate

4.1.1.1.6.1   Port Name

The 'Port Name' drop down selects a CAN/LIN port to configure. The selected CAN/LIN port name displays the current settings

4.1.1.1.6.2   Port State

The 'Port State' control has the following controls:

- Enable
- HS/SW (CAN1 Only)
- Update

4.1.1.1.6.2.1   Enable
The 'Enable' checkbox enables/disables the port.

4.1.1.1.6.2.2   HS/SW (CAN1 Only)
CAN1 has the option to configure the port as High Speed (2 Wire) or Single Wire.

4.1.1.1.6.2.3   Update
The 'Update' button sends the appropriate commands to configure the selected ports settings to the AVT-425 when connected.

4.1.1.1.6.2.4   Port Baudrate
The available port baudrate settings are displayed for the 'Port Name' and 'Port State' that is selected.

- CAN0 and CAN1 are High Speed 2 wire CAN ports
- CAN1 can be set as a Single Wire CAN port
- CAN2 and CAN3 are CAN-FD 2 wire CAN ports
- LIN0 – LIN7 are LIN ports
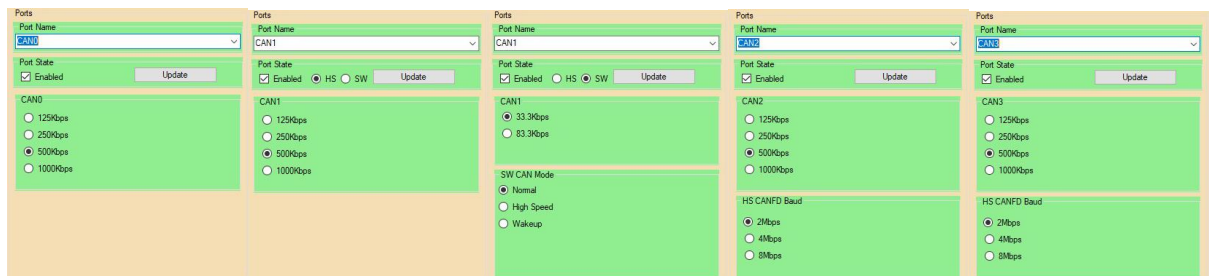
CAN0, CAN1, CAN2, CAN3 Baudrate Settings
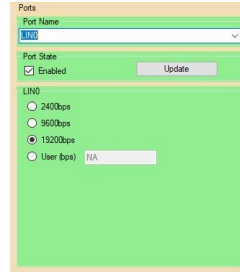
LIN0 – LIN7 Baudrate Settings

4.1.1.1.6.2.5   Warning

The 'Warning' group is displayed when the port configuration settings may need to be addressed. There are 2 causes for the warning condition:

- AVT commands are sent after the AVT Initialization process
- AVT 15765 checkbox has been enabled

4.1.1.1.6.2.5.1   AVT commands are sent after the AVT Initialization process.

This indicates that the port configuration may not be at their default values.

4.1.1.1.6.2.5.2   AVT 15765 checkbox has been enabled

When the AVT 15765 checkbox is enabled the ADT application sends all content entered in the 'Send Message' text box as one command using the ISO15765 capability of the AVT-425.

For the AVT-425 to interpret this information correctly the required commands for the AVT-425 to perform ISO15765 processing must be set up first.

Note:
> Refer to the Warning (for AVT 15765) section of this manual and the AVT-425 Protocol documentation to determine correct commands and settings for the desired configuration.

4.1.1.1.6.3   Port Configuration

The 'Port Configuration' group displays additional information for the currently selected Port Name. This information is contained in the AVTConfiguration.ini file located in the ADT application folder.

Note:
> The additional information is read only and cannot be altered by the ADT application. If this content needs to be changed the AVTConfiguration.ini would have to be edited using a text editor outside of the ADT application (i.e. Notepad). **The ADT application loads this file on startup.**

4.1.1.2   Protocol Message

The 'Protocol Message' group allows AVT-425 messages to be transmitted and received using the protocol format defined in the AVT-425 User's Manual. The 'Protocol Message' group has the following controls:

- Model
- Send On Connect
- InitializeAVT
- Diagnostic Message
- Log AVT CMDs
- Open Folder
- Send (for Send Message)
- Send Message (Format Hex: 00 11 22 33 ...)
- Add/Replace
- Remove
- In Between Time
- Browse (DWN File)
- Send (for Send DWN File)
- Display AVT-425 Protocol COM
- Clear
- Enabled

4.1.1.2.1   Model

The 'Model' box displays the AVT model supported by the ADT application.

4.1.1.2.2   InitializeAVT

The 'InitializeAVT' button sends the following commands based on the Port Settings and configurations:

- Reset AVT Device

LIN0-LIN7 Channels if Enabled
- Enable LIN operations
- Select LIN Baud Rate
- Select LIN ChecksumType
- Set LIN Query for ID byte only
- SetRcvBufferTimeout

CAN0-CAN3
- Select CAN Baud Rate
- Set Acceptance ID's
- set masks
- Select AVT425 Buffer Rcv 11Bit Operation
- Select AVT425 Buffer Rcv 29Bit Operation
- Select AVT425 Buffer Xmit Operation
- Set CAN1 physical layer to 2-wire or SWC

- Set operational status of CAN transceiver 2W Enabled or Disabled for SWC.
- Select Normal Operation

4.1.1.2.3   Diagnostic Message

The 'Diagnostic Message' drop down selects an AVT Diagnostic protocol message to send. Messages can be added or removed from the list. The following default messages are available:

- AVT Reset
- Request model number
- Request MAC address
- Request Netburner firmware version number
- Request LIN2-7 firmware version number
- Request CAN2/3 firmware version number

4.1.1.2.4   Log AVT CMDs

The 'Log AVT CMDs' checkbox enables/disables logging of the AVT protocol messages sent by the ADT application.

Note:
> If enabled, a new AVTCMDMessages_Log file is created at the start of the ADT application.
>
> The information in these files may be useful to create new DWN files for specific configurations for an AVT-425.

4.1.1.2.5   Open Folder

The 'Open Folder' button displays the folder location for the AVTCMDMessages_Log files using windows file explorer.

4.1.1.2.6   Send (for Send Message)

The 'Send' button sends the hex byte information displayed in the Send Message text box to a connected AVT-425.

Note:
> Before transmitting, the 'Send' button applies formatting to the 'Send Message' text box:
> - The message length is checked to ensure there are no partial bytes (the 'Send Message' text box background will change to red if this check fails)
> - Missing spaces between bytes are inserted
> - Leading and trailing spaces are trimmed

4.1.1.2.7   Send Message

The 'Send Message' text box allows the hex byte information for a diagnostic message to be created/edited.

Note:
> Press Ctrl+Click to edit the information in the Text Editor.

4.1.1.2.8 Add/Replace

The 'Add/Replace' button Adds or Replaces the Send Message content based on the diagnostic message description to the file DiagnosticAVTCMDMsgs.csv located in the ADT application folder.

4.1.1.2.9 Remove

The 'Remove' button Removes the Send Message content based on the diagnostic message description from the file DiagnosticAVTCMDMsgs.csv located in the ADT application folder.

4.1.1.2.10 Browse (DWN File)

The 'Browse' button displays a Select DWN File dialog that allows a .DWN file to be selected. The selected DWN file name is displayed in the 'DWN File' text box next to the Browse button.
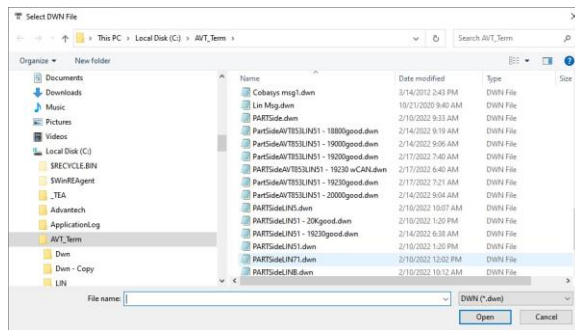
4.1.1.2.11 Send (for Send DWN File)

The 'Send' button sends the content of the .DWN file selected to the connected AVT-425 device.
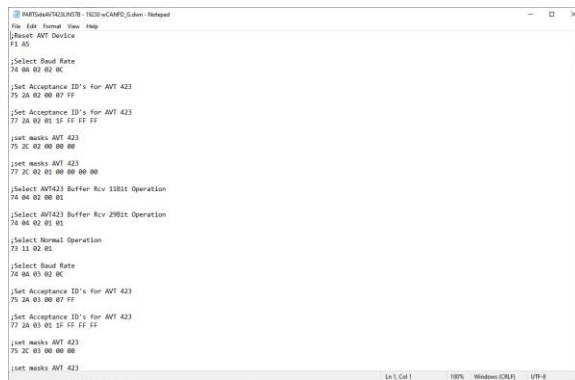
4.1.1.2.12 Display AVT-425 Protocol COM

The 'Display AVT-425 Protocol COM' spreadsheet displays the transmit and receive information for the AVT-425 device. The following are the fields:

- Date
- Time
- Port Name
- Xmit/Rcv

- ID
- D0-D63

4.1.1.2.13 Clear

The 'Clear' checkbox clears the 'Display AVT-425 Protocol COM' spreadsheet.

4.1.1.2.14 Enabled

The 'Enabled' checkbox enables the transmit and receive protocol information to be shown in the 'Display AVT-425 Protocol COM' spreadsheet.

4.1.2 CAN/LIN Controls

The 'CAN/LIN Controls' control has the following groups:

- CAN/LIN Message

4.1.2.1 CAN/LIN Message

The 'CAN/LIN Message' group allows CAN/LIN messages to be transmitted and received by the connected AVT-425. The 'CAN/LIN Message' interface formats the CAN/LIN messages sent in the background to the AVT-425 using the protocol format based on the settings and configurations of the AVT-425 Communication Protocol. The 'CAN/LIN Message' group has the following controls:

- Port Name
- Obj#
- CANFD (EDL) (CAN2-3 Only)
- Normal (BRS) (CAN2-3 Only)
- Diagnostic Message
- Send (for Send Message)
- AVT 15765
- Warning (for AVT 15765)
- ID (for Send Message)
- Send Message (Format Hex: 00 11 22 33 ...)
- Add/Replace
- Remove
- ID (for Receive Message. Only CAN)
- Receive Message
- RemoveCRLF
- Byte Offset
- to Float
- RevByteOrder
- IEEE 754 Float value text box
- to ASCII
- Clear
- Display COM
- Log to Folder
- Clear
- Enabled

4.1.2.1.1   Port Name

The 'Port name' dropdown allows selection of one of the available ports.

4.1.2.1.2   Obj#

The 'Obj#' selects the object number to use for the Port.

Note:
>   Obj# only applies to CAN channels.

4.1.2.1.3   CANFD (EDL)

The 'CANFD (EDL)' checkbox enables the message sent in CAN-FD mode.

Note:
>   CANFD (EDL) only applies to CAN FD channels.

4.1.2.1.4   Normal (BRS)

The 'Normal (BRS)' checkbox enables the message sent in CAN-FD Normal or Highspeed mode.

Note:
>   Normal (BRS) only applies to CAN FD channels.

4.1.2.1.5   Diagnostic Message

The 'Diagnostic Message' dropdown allows selection of a pre-defined COM message, or a new COM message to add. Pre-defined COM messages are contained in a comma delimited file 'DiagnosticCOMAVTmsgs.csv', located in the application folder.

4.1.2.1.6   Send (for Send Message)

The 'Send' button transmits the hex information in the 'Send Message' text box out the port specified.

Note:
>   Before transmitting, the 'Send' button applies formatting to the 'Send Message' text box:
>   - The message length is checked to ensure there are no partial bytes (the 'Send Message' text box background will change to red if this check fails)
>   - Missing spaces between bytes are inserted
>   - Leading and trailing spaces are trimmed

4.1.2.1.7   AVT 15765

When the AVT 15765 checkbox is enabled the ADT application sends all content entered in the 'Send Message' text box as one command using the ISO15765 capability of the AVT-425.

For the AVT-425 to interpret this information correctly the required commands for the AVT-425 to perform ISO15765 processing must be set up first.

Note:

By default, the AVT Diag Tool software will automatically format packets which are too large to fit into a single CAN frame as ISO 15765 multi-frame packets.

If this checkbox is checked, the AVT-425 device is expected to handle the ISO 15765 multi-frame packet processing internally. Refer to 'Warning (for AVT 15765)' for further information.

4.1.2.1.8   Warning (for AVT 15765)

Selecting the 'Warning' button displays 1 of 2 warnings:

- 'AVT 15765' checkbox is checked
- 'AVT 15765' checkbox is unchecked

4.1.2.1.8.1   'AVT 15765' checkbox is checked

Warning: Ensure the AVT-425 has been set up for ISO 15765 processing.

It is the responsibility of the user to set up the ISO 15765 processing in the AVT-425 device using the following commands:

CAN0 and CAN1	
Set up object ID:	**7x 2A**
Configure object for transmit/receive:	**7x 04**
Pair objects:	**7x 28**
Set up padding:	**7x 27**
CAN2 and CAN3	
Set up object ID:	**7x 2A**
Configure object for receive:	**7x 04**
Configure object for transmit:	**7x 17**
Pair objects:	**7x 28**
Set up padding:	**7x 27**

For more information, refer to Section 10.9 and Section 10.10 in the AVT-425 User's Manual.

The following .dwn files contain examples for ISO 15765 setup:

CAN0 and CAN1
ISO15765InitializationExample.dwn
ISO15765InitializationExampleModuleSide.dwn
CAN2 and CAN3
ISO15765InitializationExampleClassicalCAN.dwn
ISO15765InitializationExampleClassicalCANModuleSide.dwn
ISO15765InitializationExampleCANFD.dwn
ISO15765InitializationExampleCANFDModuleSide.dwn

4.1.2.1.8.2   'AVT 15765' checkbox is unchecked

> **Warning: Ensure the AVT-425 has been set up for normal operation.**

If the user has set up the ISO 15765 processing in the AVT-425 device, ensure that the device has been re-initialized to the default settings before attempting to transmit large packets while this box is unchecked.

For more information, refer to Section 10.9 and Section 10.10 in the AVT-425 User's Manual.

4.1.2.1.9 ID (for Send Message)

The 'ID' text box allows the ID of the transmit message specified. The ID has the following format:

    0x# or #
    where # is:

    CAN: a Hex number from 0-7FF (11bit) or 0-1FFFFFFF (29bit).
    LIN: a Hex number from 0-3F.

4.1.2.1.10 Send Message (Format Hex: 00 11 22 33 ...)

The 'Send Message' text box allows the input of a CAN or LIN message to be transmitted to the selected DUT. The message has the following format:

    hh hh hh … where hh is a Hex number from 00-FF.

    Ex: 02 21 E1

Note:
    If there is more data to send then what can be seen in the 'Send Message' text box, the data can be edited using the built in Text Editor. Ctrl+Click the 'Send Message' text box to edit the content. Refer to the Text Editor section of this manual for further information.

4.1.2.1.11 Add/Replace

The 'Add/Replace' function allows a message to be added or replaced in the pre-defined COM message list for the specified port name.

4.1.2.1.12 Remove

The 'Remove' function allows a message to be removed from the pre-defined COM message list.

4.1.2.1.13 ID (for Receive Message)

The 'ID' text box allows the ID of the receive message specified. The ID has the following format:

    0x# or #
    where # is:

    CAN: a Hex number from 0-7FF (11bit) or 0-1FFFFFFF (29bit).

4.1.2.1.14 Receive Message

The 'Receive Message' text box displays CAN messages received from a transmitted message for the receive ID specified. The CAN responses are displayed in HEX format.

4.1.2.1.15 RemoveCRLF

The 'RemoveCRLF' checkbox will remove all CR and LF from the receive message when the 'to ASCII' operation is performed.

4.1.2.1.16 Byte Offset

The byte offset specifies where in the receive message to obtain the 4 hex bytes to calculate the IEEE 754 Float value.

4.1.2.1.17 to Float

The 'to Float' sub-section converts a 4-byte IEEE 754 Float value to decimal equivalent. The hex information to convert is taken from the receive message. Spaces are ignored in the conversion.

4.1.2.1.18 RevByteOrder

The 'RevByteOrder' checkbox indicates to reverse the order of the IEEE 754 bytes and then perform the conversion.

4.1.2.1.19 IEEE 754 Float value text box

The 'IEEE 754 value text box' shows the value converted to decimal.

4.1.2.1.20 to ASCII

The 'to ASCII' sub-section converts bytes in the Receive Message to ASCII representation. The conversion will be displayed below the current text in the 'Receive Message' text box and separated with a dashed line showing the number of Bytes converted.

Note:
> Values that are outside the range of ASCII displayable characters (0x20 – 0x7F) are displayed as byte representation as <0x##>.

4.1.2.1.21 Clear

The 'Clear' button clears the contents of the receive message.

4.1.2.1.22 Display COM

The 'Display COM' spreadsheet displays the transmit and receive information for the ports specified for the AVT-425 device. The following are fields:

- Date
- Time
- Port Name
- Xmit/Rcv

- ID
- EDL
- BRS
- D0-D63

Note:

Right-Click the 'Display Com' group name to access the popup Port name filter list.

Left-Click the clear checkbox to clear the spreadsheet.

The spreadsheet can be copied to the clipboard and pasted to excel.

AVT Command / Response messages are displayed and are selected/deselected with the AVT port name. Commands are displayed in Tan and Responses are displayed in light blue.

4.1.2.1.23 Log to Folder

The 'Log to Folder' checkbox enables the communications log to a specified file. Selecting the checkbox displays a 'Log to Folder' dialog and allows the folder and filename specified.
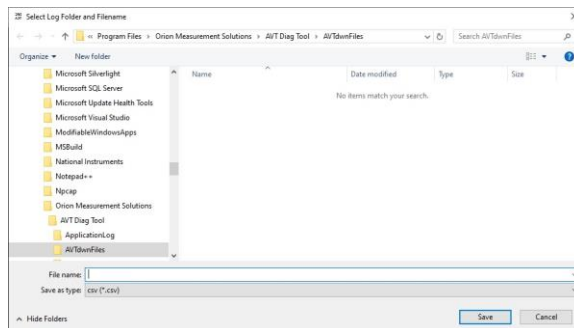
Deselecting the checkbox disables the log.

Note:

Logs are in csv format.

After 32000 rows a new log is created with an incremented Suffix starting at 000000001.

Port Filters are NOT applied to the log

4.1.2.1.24 Clear

The 'Clear' checkbox clears the 'Display COM' spreadsheet.

4.1.2.1.25 Enabled

The 'Enabled' checkbox enables/disables the display of the transmit and receive information in the 'Display COM' spreadsheet.

Note:

Disable of the display has no effect on logs

5 Application Log

The 'Application Log' tab displays software errors that the ADT application encounters. Application log files are created in the ADT application folder. Application logs contain information that will help in debugging and correcting problems that may occur. The Error Code is a negative value and points to the exact location in the application that the error occurred.
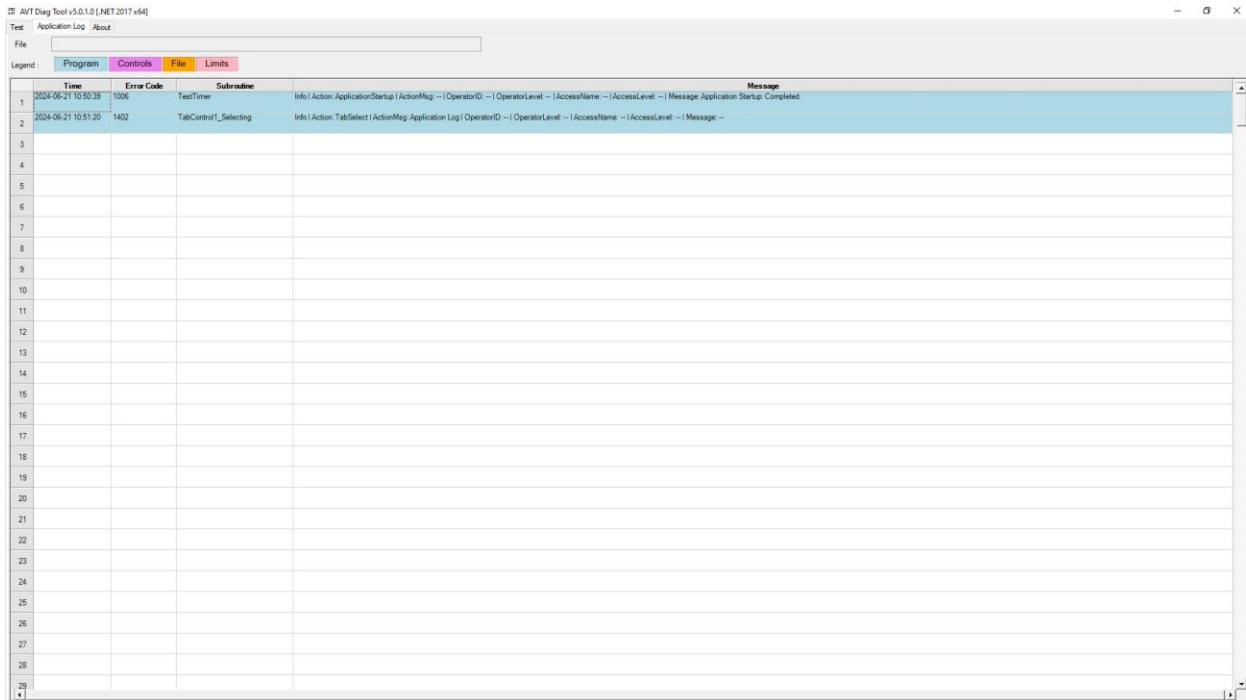
The following are the categories:

- File Menu
- Filename
- Legend
- Spreadsheet

5.1 File Menu

The 'File' menu allows previous 'Application Log' files to be opened and viewed. Select the 'Open' option from the 'File' menu, an 'Open' file dialog box displays and allows an 'Application Log' file to be selected.

5.2 Filename

The 'Filename' displays the currently opened 'Application Log' file.

5.3 Legend

The 'Legend' displays the different categories of errors and their associated colors.

5.4   Spreadsheet

The 'Spreadsheet' has the following columns of Information:

- Time
- Error Code
- Subroutine
- Message

5.4.1   Time

The 'Time' column indicates the date and time that the specific entry was made.

5.4.2   Error Code

The 'Error Code' column indicates a unique code that is used to locate the issue in the source code.

5.4.3   Subroutine

The 'Subroutine' column indicates the name of the subroutine that caused the entry.

5.4.4   Message

The 'Message' column indicates other information related to the entry.

6   Text Editor

The Text Editor can be used to modify the 'Send Message' text box Content, this can be useful to edit large messages.
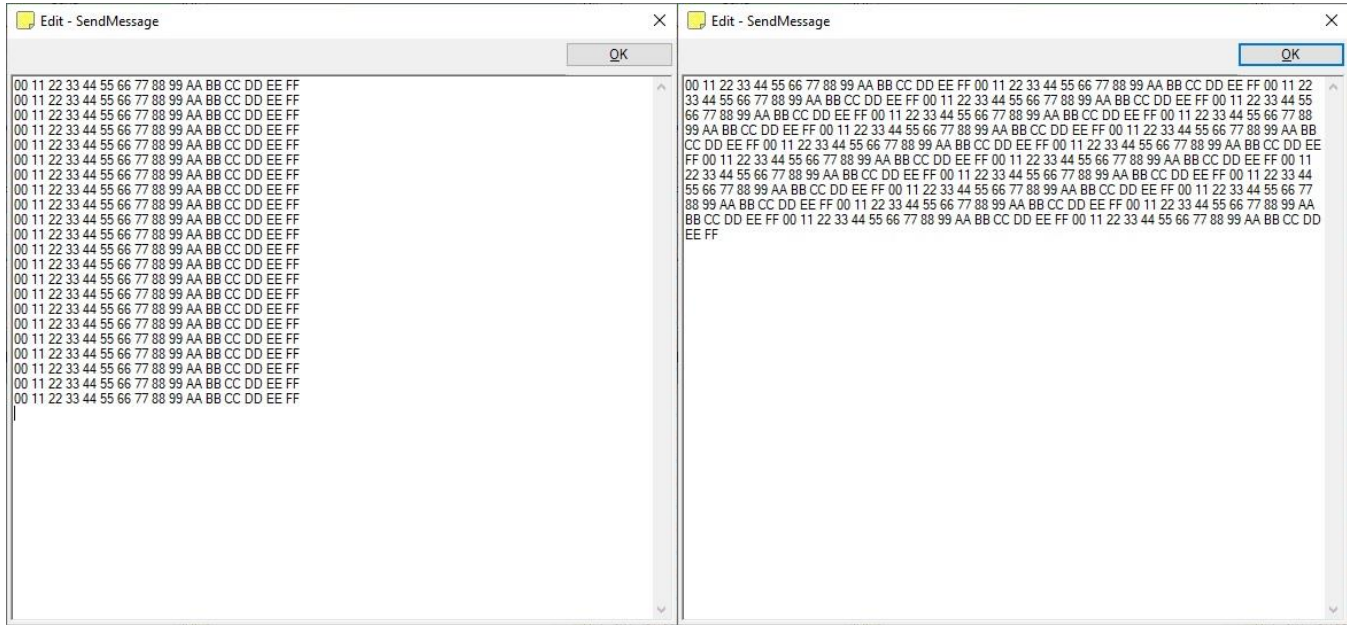
Ctrl+Click in the 'Send Message' text box to display the Text Editor. The following rules apply:

- Only hexadecimal characters are allowed
- Carriage Returns and Line Feeds (CRLF) are removed on close
- Extra spaces between Hex bytes are not allowed.
- No spaces between Hex bytes are corrected on open and close.

Note:
        The Text Editor can be resized, and the size is remembered when Ok is selected.

7 DWN Files

A DWN file is a text file with the extension of .DWN that contains AVT-425 protocol commands that have been set up to use with the ADT application.

Example DWN file

The following rules apply:

- Lines that start with a semi-colon (;) are comments and are not transmitted to the AVT-425.
- Lines that are empty are ignored.
- Protocol Lines have the format: hh hh hh … where hh is a Hex number from 00-FF.

There are default DWN files that the ADT application creates and are referenced in the AVT-425 v5.0.0.x Users Manual.pdf:

- CAN3ClassicalCANCommunicationsExample.dwn
- CANFDCommunicationsExample.dwn
- CANType1PeriodicMessageExample.dwn
- CommunicationsExample.dwn
- CRCSetup_CAN0_SAEJ1850.dwn
- CRCSetup_SAEJ1850_LIN0M_LIN1S.dwn
- IDAndMaskExample.dwn
- InitializeDWNFile.dwn
- ISO15765InitializationExample.dwn
- ISO15765InitializationExampleCANFD.dwn
- ISO15765InitializationExampleClassicalCAN.dwn
- LINCommunicationsExample.dwn
- LINType1PeriodicMessageExample.dwn

- PeriodicSetup_CAN0.dwn
- PeriodicSetup_CAN2_FD.dwn
- PeriodicSetup_DropPackets_LIN0M_LIN1S.dwn
- PeriodicSetup_NoDropPackets_LIN2M_LIN3S.dwn
- RollingCounterSetup_CAN0_Increment_10000.dwn
- RollingCounterSetup_CAN1_Decrement_255.dwn

The default DWN files are created when the ADT application starts if the 'AVTdwnFiles' folder is empty or does not exist.

8   Configuration (External)

There are various configuration and initialization files that contain parameters for the ADT application, these parameters are loaded on startup by the ADT application and are considered configuration items that are not normally required to be accessible for operation of the ADT application. All Configuration and Initialization files are located in the ADT application folder. In general Configuration files have default values and the file is created by the ADT application if the file does NOT exist.

8.1   Configuration Files (.ini)

.Ini Configuration files are considered necessary for proper operation and MUST have defined values.

8.1.1   Notepad

.ini Configuration files may be edited using a Text Editor (i.e. Notepad). The ADT application MUST be exited prior to editing these files as many of the files are saved on exit of the ADT application and would be written with the values that are already loaded when the ADT application exits.

8.2   Configuration Files (.csv)

.csv Configuration files are maintained by the ADT application.

Files

- AVTConfiguration.ini – contains settings for the AVT-425
- AVTControlConfig.ini – contains settings for the AVT-425 Communication Protocol control.
- COMDBConfiguration.ini – contains settings for the COM Database interface
- config.ini – contains general settings for the ADT application
- DiagnosticAVTCMDMsgs.csv – contains list of messages for the AVT-425 Communication Protocol control.
- DiagnosticCOMAVTConfig.ini – contains settings for the CAN/LIN control.
- DiagnosticCOMAVTmsgs.csv – contains list of messages for the CAN/LIN control.

Note:
   CHANGING SETTINGS CONTAINED IN THESE CONFIGURATION FILES MAY LEAD TO UNEXPECTED RESULTS.

Folders

- ApplicationLog – contains application log files for the ADT application. Each time the ADT application is started a new file is created.

- AVTCMDLogFiles – contains log files for AVT-425 Communication Protocol commands that have been sent.

   Note:
      Uncheck 'Log AVT CMDs' to disable these logs being written.

- AVTdwnFiles – contains files that define a list of AVT-425 Communication Protocol commands that can be sent to an AVT-425.