

# MESSAGE LIST

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# CHAPTER 10

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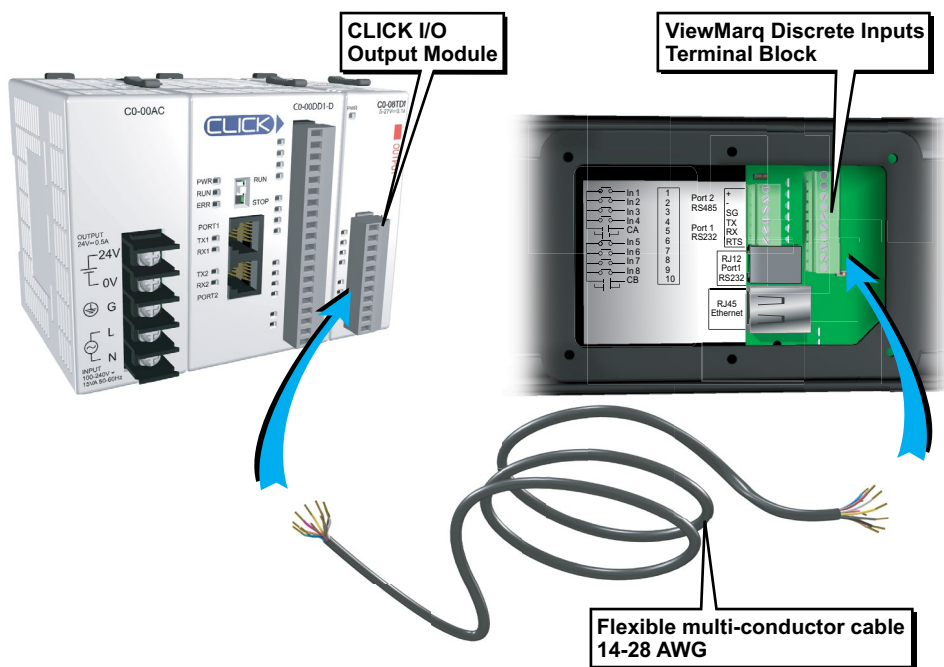
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# Introduction

Message lists are created using the ViewMarq configuration software. The Message List can be downloaded to the ViewMarq and triggered for display using ASCII commands or discrete signals wired to the ViewMarq input terminals.

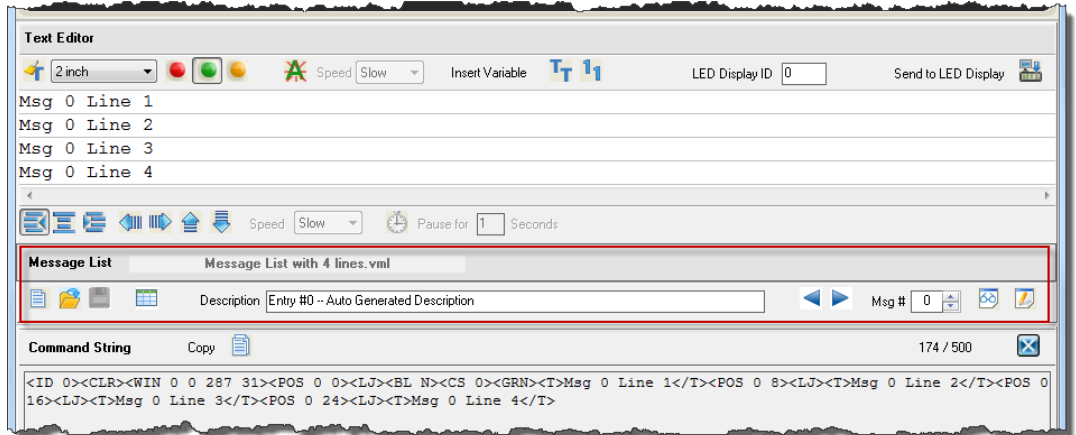
## Message List Features

- Up to 200 Messages can be added to a Message List and saved on the PC.
- Multiple Message Lists can be saved to the PC.
- A single Message List can be downloaded to the ViewMarq memory.
- The Message List in the display is retained on power cycle.
- Messages downloaded to the ViewMarq can be triggered by using the following:
  - <DO n> ASCII command from the PLC
  - Discrete input terminals inside the communication connection opening of the ViewMarq
- Message #0 becomes the Startup message.

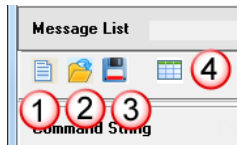


## Main Window Message List Toolbar

The Message List control toolbar is in the Main Window of the ViewMarq Configuration Software.

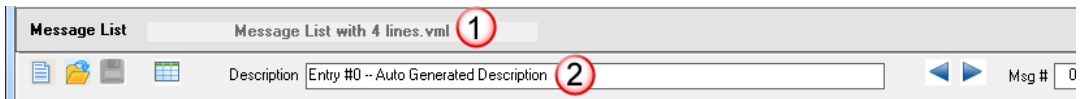


The Message List toolbar allows you to:



- 1) Create a new Message List
- 2) Open an existing Message List
- 3) Save a current Message List
- 4) Open the Message List Manager

The Message List toolbar also shows:



- 1) The Message List file name
- 2) The Description for the present message in the list
  - a) The Description is auto-generated for convenience but can be edited by the user.

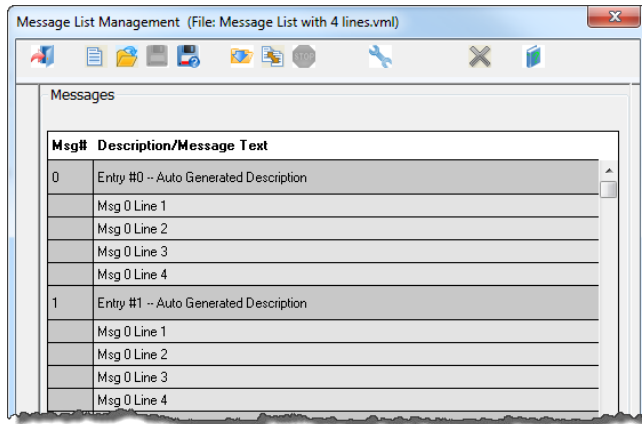
From the Message List toolbar you can:



- 1) Read the previous message in the Message List into the editor
- 2) Read the next message in the Message List into the editor
- 3) Select a particular message number location to Read or Write
- 4) Read the message from the selected location into the Text Editor
- 5) Write the present message in the Text Editor to the selected location

# The Message List Management Window

The Message List Window is opened using the Open Message List Management Dialog button.

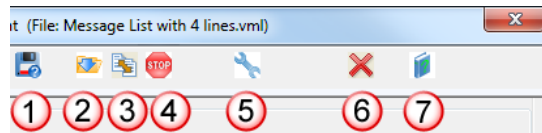


In the Message List Manager you can:



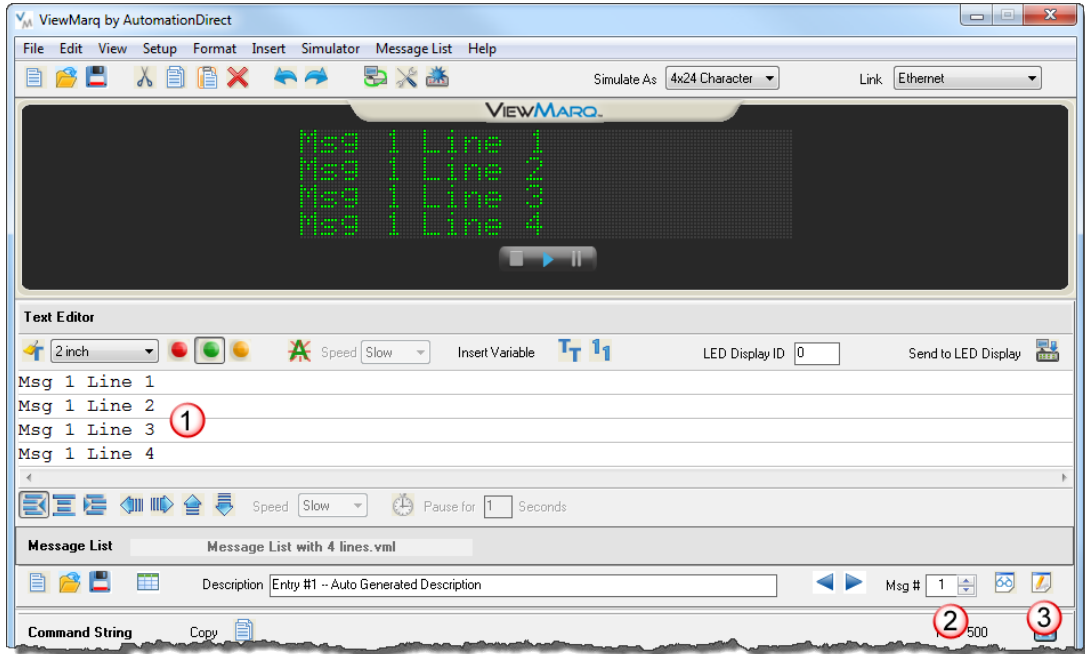
- 1) Close the Message List Management dialog
- 2) Create a new Message List
- 3) Open an existing Message List
- 4) Save the current Message List

The Message List Management toolbar also includes:



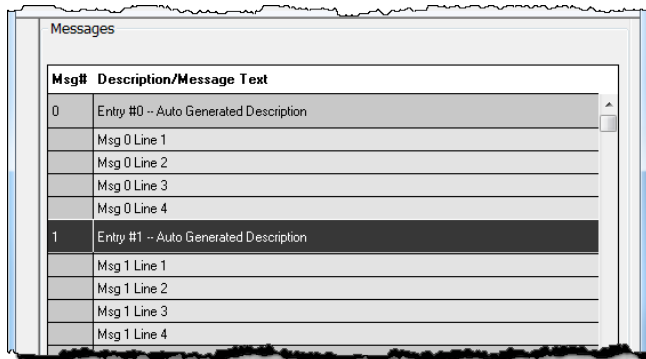
- 1) Save the current Message List with a different file name
- 2) Download the Message List to a connected ViewMarq LED display
- 3) Compare a Message List file to the Message List in the connected ViewMarq display
- 4) Stop the Message List download or compare
- 5) Open the Message List test dialog
- 6) Delete the selected Message from the list
- 7) Open Message List help

## Adding Messages to a Message List

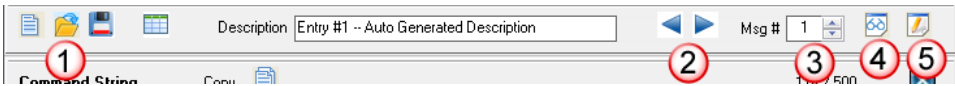


- 1) Create a message in the ViewMarq Text Editor.
- 2) Select a message number on the Message List Toolbar.
- 3) Select the Write Message toolbar button.

The message in the Text Editor with the Description and Text is saved to the Message List to the position selected as shown.



## Editing an Existing Message List



- 1) Open a previously saved Message List
- 2) Select the Next or Previous Message buttons until the message is selected
- or
- 3) Select the message number
- 4) Select the Read Message toolbar button

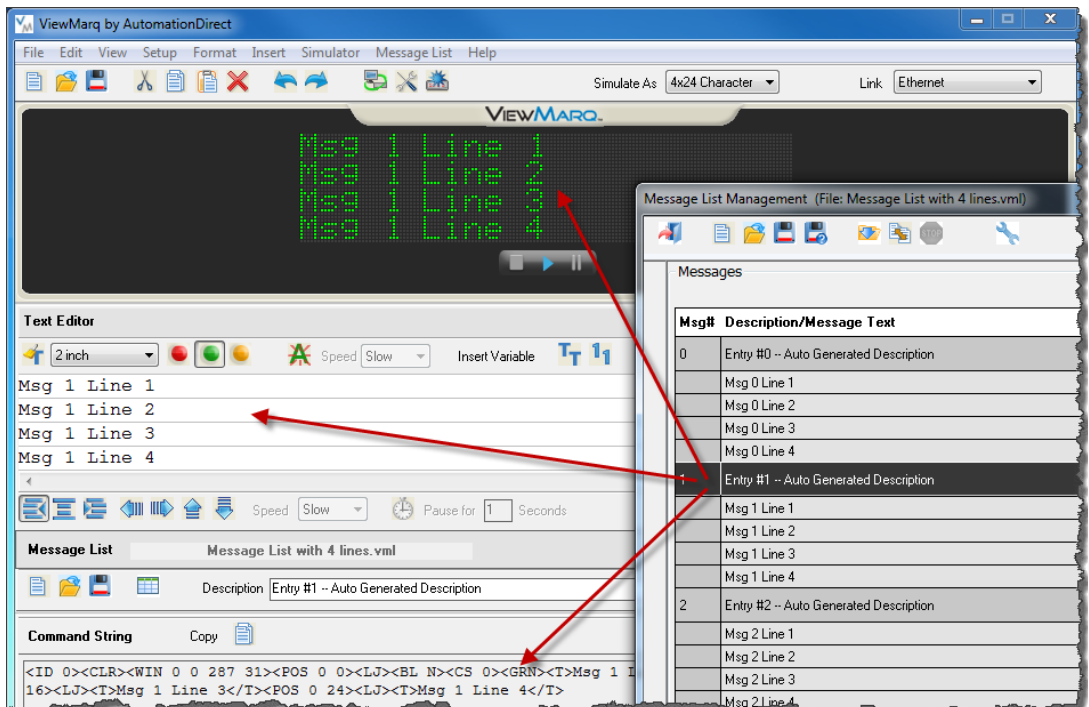
The message selected will be read from the Message List into the text editor. Make any modifications necessary.

- 5) Select the Write Message toolbar button

The message in the Text Editor with description and text is saved to the Message List.

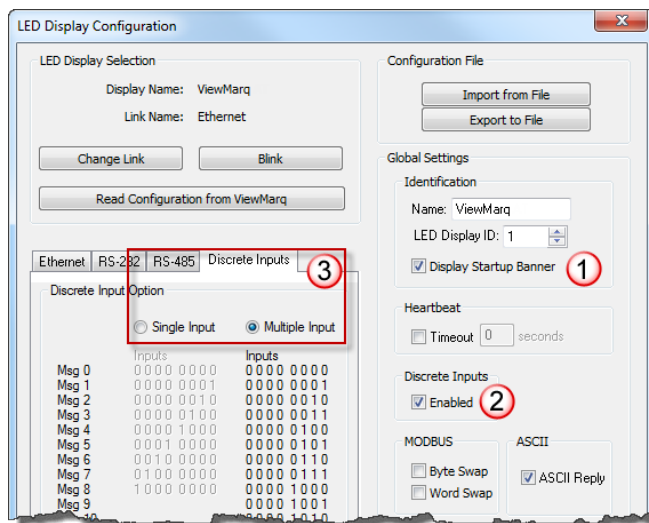
### Autoloading Message

Automatically load a message into the text editor by selecting it in the Message List Manager window.



## Configuring the ViewMarq display for Message List

Starting with Firmware version 1.65, the ViewMarq LED display is configured to accept and display messages from a downloaded Message List. This may be accomplished using an ASCII command or the discrete inputs.



### 1) Display Startup Banner:

**NOTE:** This setting only takes affect if there is no message loaded into Message #0.

If Display Startup Banner is selected, the ViewMarq Name, Firmware and Communication Settings will be displayed on power up when there are no Discrete Inputs turned on.

If Display Startup is not selected, then the Display will be blank on power up when there are no Discrete Inputs turned on.

### 2) Discrete Inputs:

To use the hardwired Discrete Inputs to display messages in the Message List, the Discrete Inputs checkbox must be selected.

### 3) Discrete Input Option:

Single or Multiple Inputs - See Triggering Messages in this chapter.



Message Exists in Panel Memory	Discrete Inputs Enabled	Display Startup Banner Enabled	On Start Up ViewMarq will display
X	X	X	Triggered Message per Discrete Inputs
X	X		Triggered Message per Discrete Inputs
X		X	Startup Banner (Comm Settings)
X			Blank Display
	X	X	Startup Banner (Comm Settings)
	X		Blank Display
		X	Startup Banner (Comm Settings)
			Blank Display

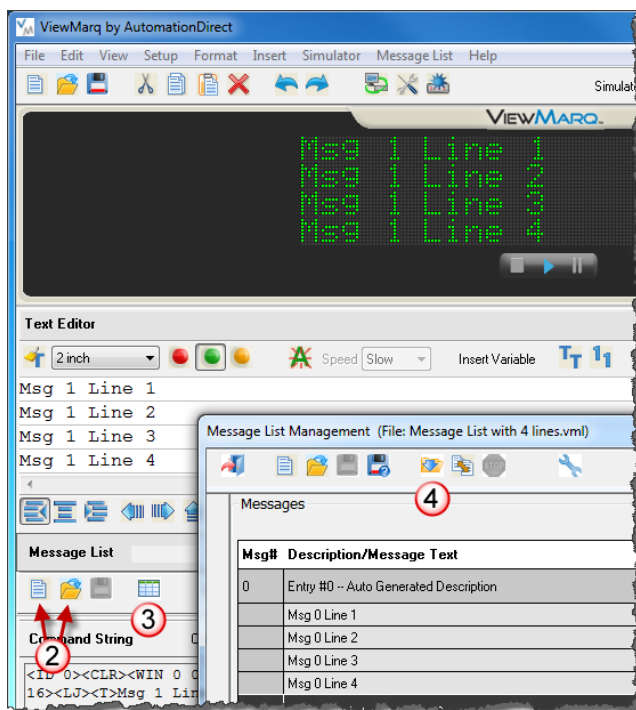
At startup, the ViewMarq will be in one of three states:

- 1) The message triggered by Discrete Inputs, if the message exists in the panel memory and the Discrete Inputs are enabled and on
- 2) The Startup Banner (Communication Settings), if the the Startup Banner is enabled and discrete inputs are not enabled or the Startup Banner is enabled and the message triggered is blank
- 3) The display is blank, if the Startup Banner is not enabled and Discrete Inputs are not enabled or the Startup Banner is not Enabled and the message triggered by the Discrete Inputs is blank



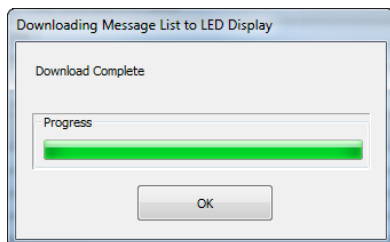
**NOTE:** After any changes are made, the configuration needs to be written to the ViewMarq display in order for them to take effect.

## Downloading Messages to the ViewMarq Display



Open the Message List Management window and select the following:

- 1) Make sure you have a good link to a connected ViewMarq display.
- 2) Make a new Message List or open an existing Message List.
- 3) Open the Message List Management window.
- 4) Select the Download Message List Toolbar Button and select Yes in the Message List Download dialog box to confirm the Message List overwrite.



# Triggering Messages in the Display

Messages can be triggered to display on your ViewMarq two different ways.

- 1) <DO n> ASCII command where “n” is the Message Number.
- 2) Discrete Inputs on the back of the display (if enabled in LED Display Configuration).

## Using the <DO n> command

From the PLC an ASCII String can be sent to the ViewMarq to trigger a stored message. For example, if the following message is stored as Message 6 in ViewMarq Node 1:

```
<CLR><WIN 0 0 287 31><POS 0 0><LJ><BL N><CS 0><GRN><T>Hello
World</T>
```

The Command String from the PLC to trigger this message is:

```
<ID 1><DO 6>
```

## Using the Discrete Inputs

There are two modes for triggering the discrete inputs depending on how the ViewMarq display is configured:

- 1) Single Input - up to eight messages
- 2) Multiple Input - up to 200 messages

Using the last example of a message stored in Message 6.

- 1) In Single Input Mode – Turn on input 6
- 2) In Multiple Input Mode – Turn on inputs 2 and 3

The maximum rate at which messages can be triggered is 500ms per message.

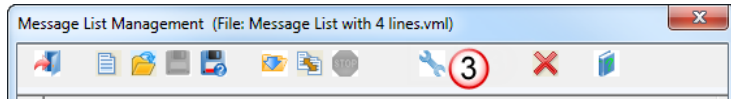
	Inputs	Inputs
Msg 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
Msg 1	0 0 0 0 0 0 0 1	0 0 0 0 0 0 0 1
Msg 2	0 0 0 0 0 0 1 0	0 0 0 0 0 0 1 0
Msg 3	0 0 0 0 0 1 0 0	0 0 0 0 0 0 1 1
Msg 4	0 0 0 0 1 0 0 0	0 0 0 0 0 1 0 0
Msg 5	0 0 0 1 0 0 0 0	0 0 0 0 1 0 0 1
Msg 6	0 0 1 0 0 0 0 0	0 0 0 0 0 1 1 0
Msg 7	0 1 0 0 0 0 0 0	0 0 0 0 0 1 1 1
Msg 8	1 0 0 0 0 0 0 0	0 0 0 0 1 0 0 0
Msg 9		0 0 0 0 1 0 0 1
Msg 10		0 0 0 0 1 0 1 0
Msg 11		0 0 0 0 1 0 1 1
Msg 12		0 0 0 0 1 1 0 0
Msg 13		0 0 0 0 1 1 0 1
...		
Msg 199		1 1 0 0 0 1 1 1



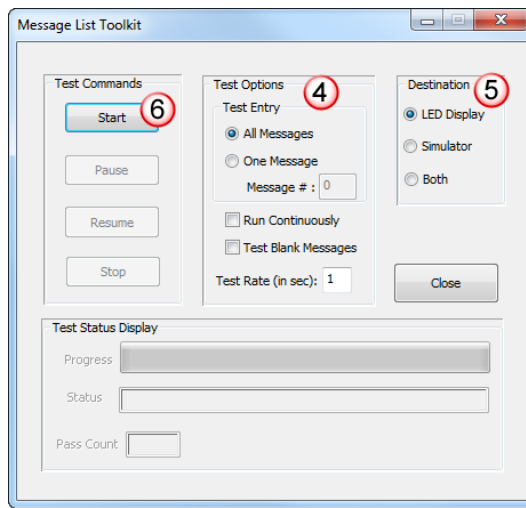
**NOTE:** See Chapters 2 and 3 for more information on Discrete input specifications and connections.

# Testing a Message List

The Message List can be tested in the ViewMarq Display, on the Simulator or on both at the same time.



- 1) Open or create a new Message List.
- 2) Make sure you have a good link to a ViewMarq LED display and download the Message List to be tested to the display.
- 3) From the Message List Management window, select the Test Message List toolbar button.



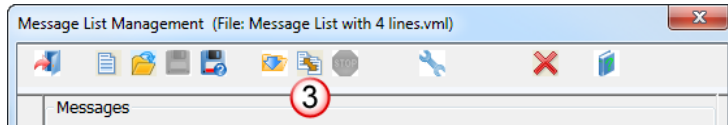
- 4) Select the desired Test Options.
  - a. Run Continuous - This selection will loop through the message list indefinitely. This is only available when the destination is the LED display.
  - b. Test Blank Messages - When selected the software will attempt to test all 200 messages to see whether a string is stored or not. For blank messages an E19 error will display on the ViewMarq display.
- 5) Select the Destination for the test.
  - a. LED Display
  - b. Simulator
  - c. Both
- 6) Select Start



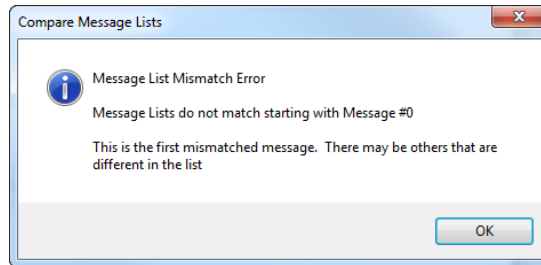
**NOTE:** The LED Display will show the messages in memory. The Simulator will show the messages in the open Message List. If these do not match, you will get unexpected results. Testing Blank Messages will cause an E19 Error to be displayed.

## Compare Message Lists

The Message List in the ViewMarq display may be compared to any list that has been saved.



- 1) Open or create a new Message List.
- 2) Make sure you have a good link to a ViewMarq LED display.
- 3) From the Message List Management window, select the Compare Message List toolbar button.



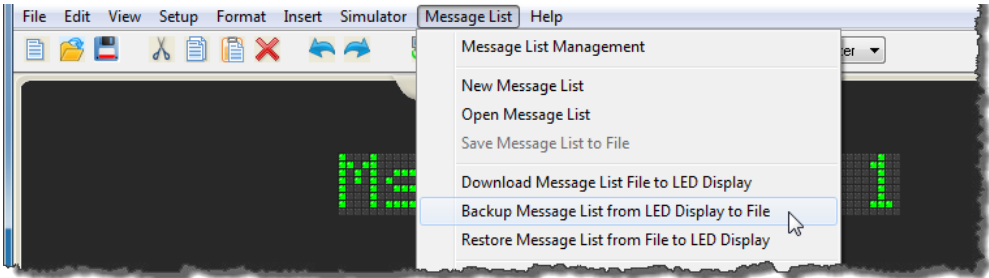
- 4) When the compare operation reaches a message in the display that does not match the same message in the open list, it will stop and indicate the first message that is different.



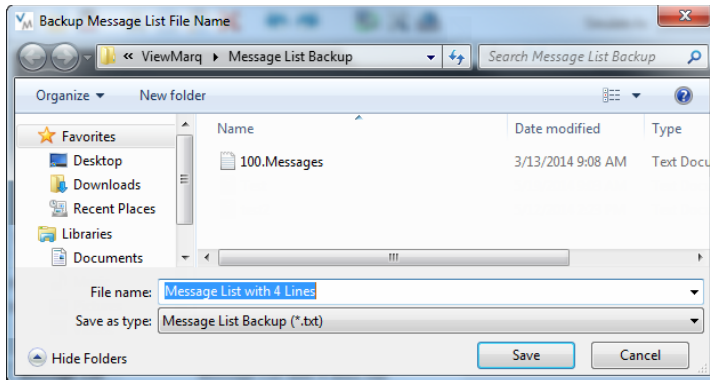
**Warning:** If the Message List in the Display was downloaded with Byte Swap selected on the Link, but the Link used during the compare is not Byte Swapped, the Compare will fail at Message #0.

## Backup a Message List to a File

Any Message List in a display can be backed up as a Tab Delimited TXT file and later restored to the display.



- 1) Make sure you have a good link to a ViewMarq LED display.
- 2) From the pulldown menu, select Message List, Backup Message List from LED Display to File.



- 3) Enter a filename and click the Save button.
- 4) The Backing up Message List from LED Display progress dialog will open to show the progress of the backup. Click OK when backup is complete.

The resulting .txt file contains the:

- 1) Message number
- 2) ASCII string

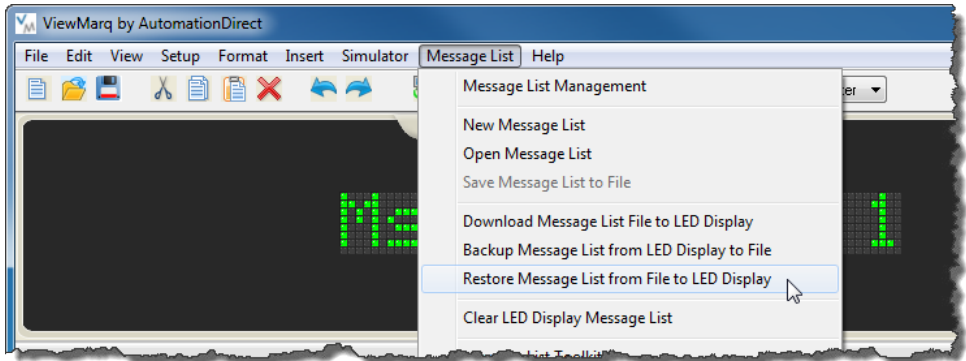
A	B
1	Version - 2.00.0017
2	0 <CLR><WIN 0 0 287 31><POS 0 0><LJ><BL N><CS 0><GRN><T>Msg 0 Line 1</T><POS 0 8><LJ><T>Msg 0 Line 2</T><POS 0 16><
3	1 <CLR><WIN 0 0 287 31><POS 0 0><LJ><BL N><CS 0><GRN><T>Msg 1 Line 1</T><POS 0 8><LJ><T>Msg 1 Line 2</T><POS 0 16><
4	2 <CLR><WIN 0 0 287 31><POS 0 0><LJ><BL N><CS 0><GRN><T>Msg 2 Line 1</T><POS 0 8><LJ><T>Msg 2 Line 2</T><POS 0 16><
5	3 <CLR><WIN 0 0 287 31><POS 0 0><LJ><BL N><CS 0><GRN><T>Msg 3 Line 1</T><POS 0 8><LJ><T>Msg 3 Line 2</T><POS 0 16><



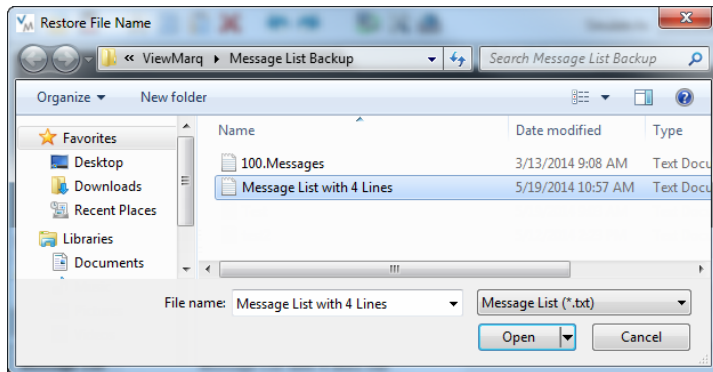
**NOTE:** Backup Message Lists cannot be opened in the ViewMarq Software for editing. They can only be restored directly to the display.

# Restore a Message List File to a ViewMarq Display

A Backup Message List can be restored directly to a connected LED Display.

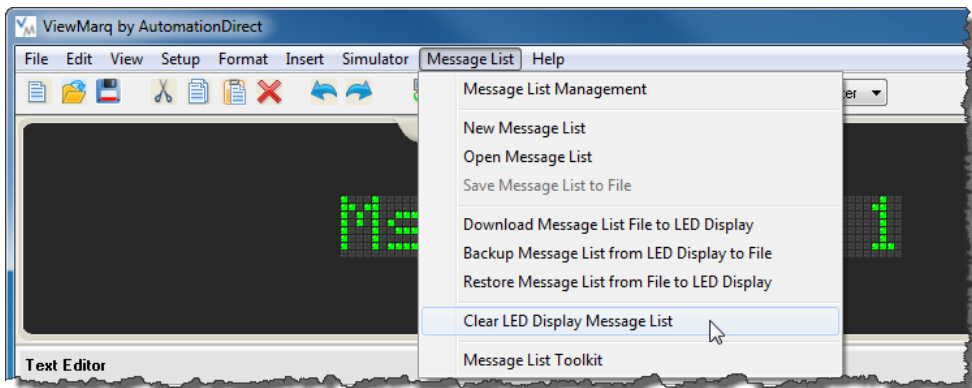


- 1) Make sure you have a good link to a ViewMarq LED display.
- 2) From the pulldown menu, select Message List, Restore Message List from File to LED Display.



- 3) Select the file to restore and click the Open button.
- 4) The Restoring Message List to LED Display progress dialog will open to show the progress of the backup.
- 5) Click OK when restore is complete.

# Clear Message List in the LED Display



- 1) Make sure you have a good link to a ViewMarq LED display.
- 2) From the pulldown menu, select Message List, Clear LED Display Message List.

## Format of Stored Messages



The above message is stored as a ViewMarq message on the PC as:

```
<ID 1><CLR><WIN 0 0 287 31><POS 0 0><LJ><BL N>  
<CS0><GRN><T>Hello World</T>
```

It is stored in the ViewMarq display as:

```
<CLR><WIN 0 0 287 31><POS 0 0><LJ><BL N>  
<CS0><GRN><T>Hello World</T>
```

The <ID 1> is stripped off since it is an addressing command that is no longer needed when the message is stored in a particular ViewMarq display.