

# DLite Message Editor

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## Chapter 1 DLite software installation

### 1-1 Checks your system requirement

The system requirement suggested by DLite program is shown as follow:

<p><b>Operation system version:</b> Windows 2000 · Windows XP or Higher</p> <p><b>CPU:</b> Pentium II 350 MHz or higher</p> <p><b>RAM:</b> 128MB or higher</p> <p><b>Display:</b> Standard display</p> <p><b>Disk space required:</b> 5 MB or Higher</p>
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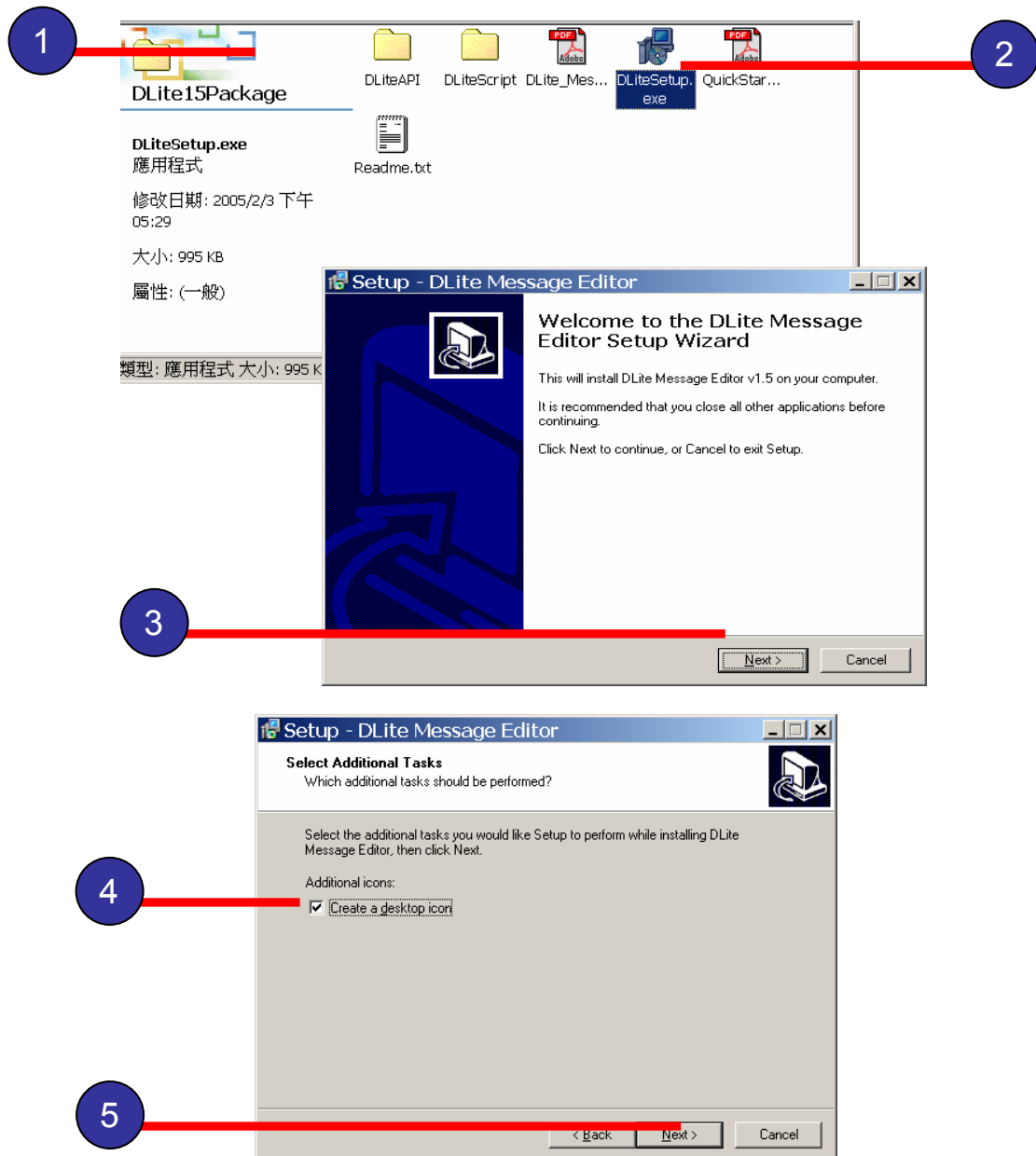
In order to successfully start the DLite program, your windows system must be windows 2000 or higher, this program can't support windows 98 or any previous version windows.

## 1-2 DLite program Installation

Please browse the CD-ROM DLite directory to install DLite kit software. You can use simple drag and drop to finish

**Step 1:** Find the DLiteSetup.exe from your CD-ROM

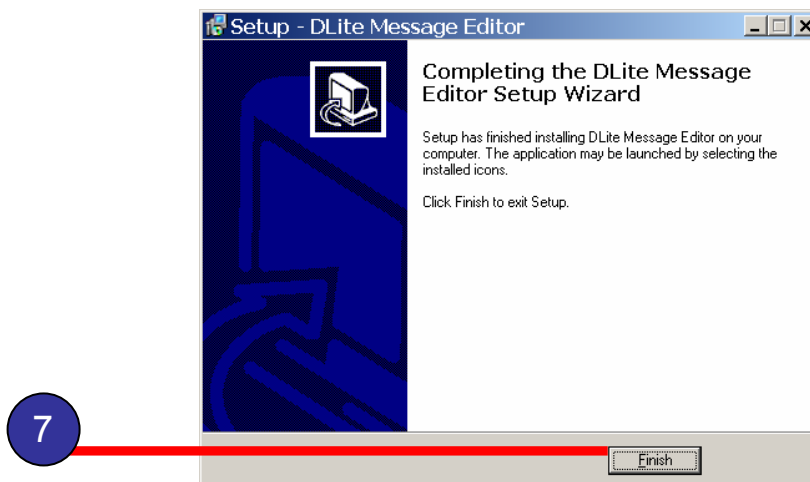
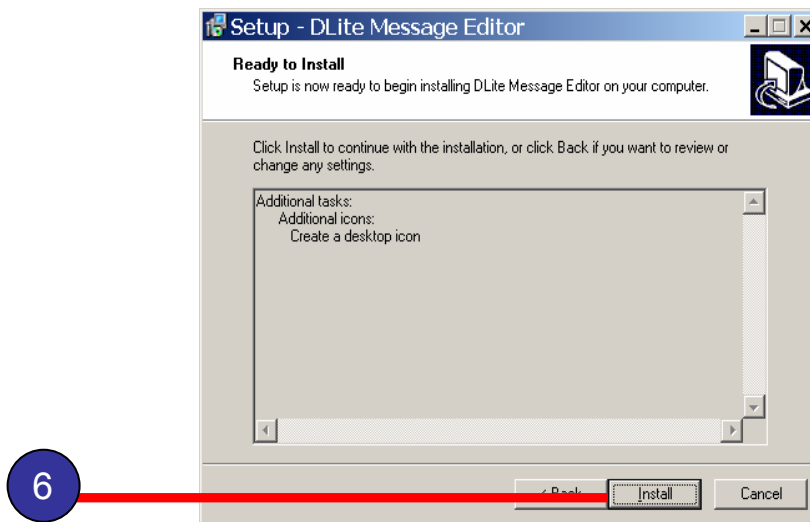
**Step 2:** Double click the DLite, start installation process.



**Step 3:** Press **[Next]** to start installation process.

**Step 4:** Please select create desktop icon, if you want start the program directly from desktop.

**Step 5:** Click **[Next]** to continue installation progress.



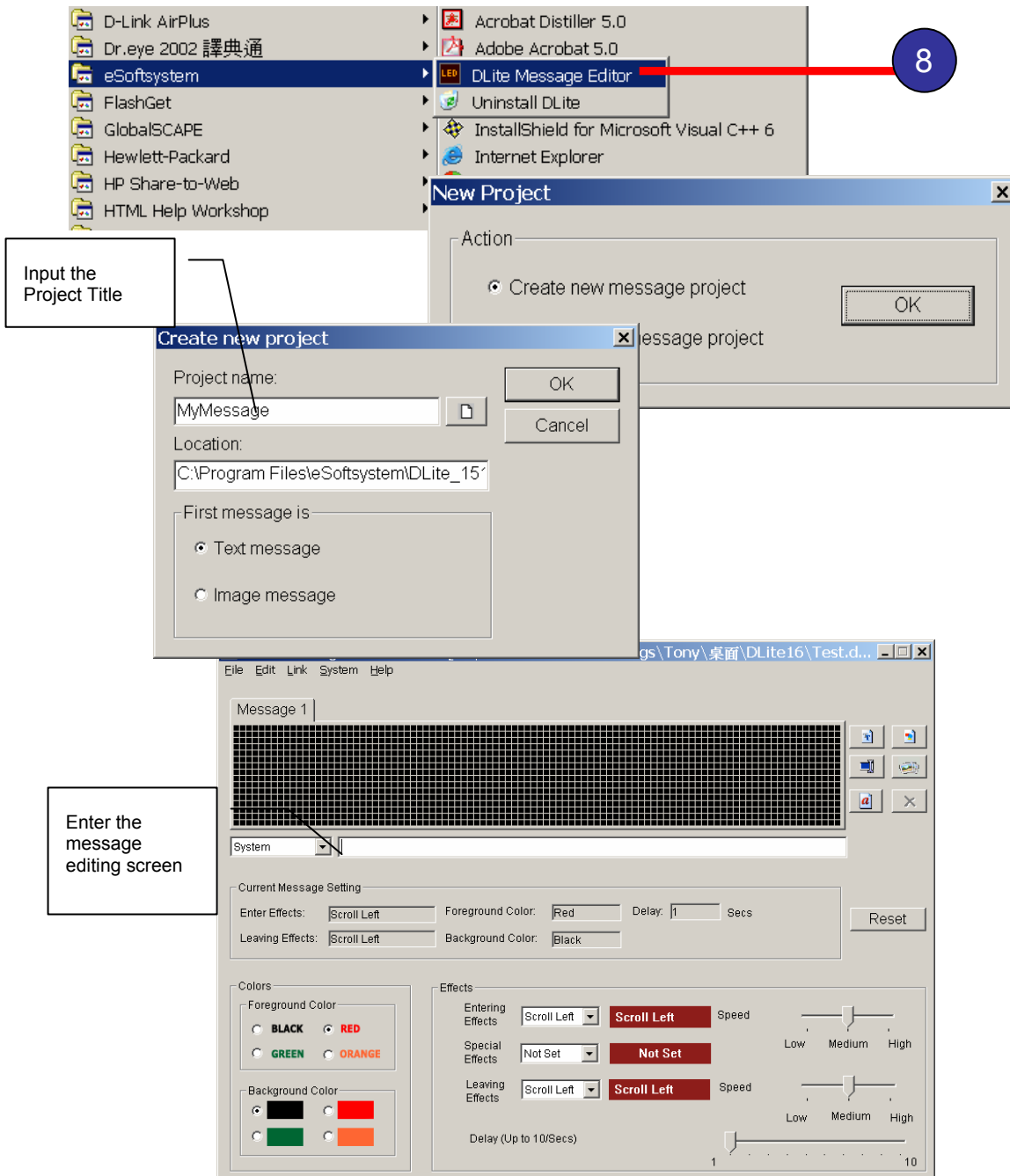
**Step 6:** Click **[Install]** to start installation.

**Step 7:** Click **[Finish]** to finish the software installation.

The DLite message software will be installed under \Program Files\eSoftsystem\DLite.exe. After installation process complete, you could see the icon on the desktop and the Start Menu.

Icon will show on the installation directory and desktop.

**Step 8:** Click the DLite icon to on the [Start] menu [Program/eSoftsystem/DLite] to activate the program.

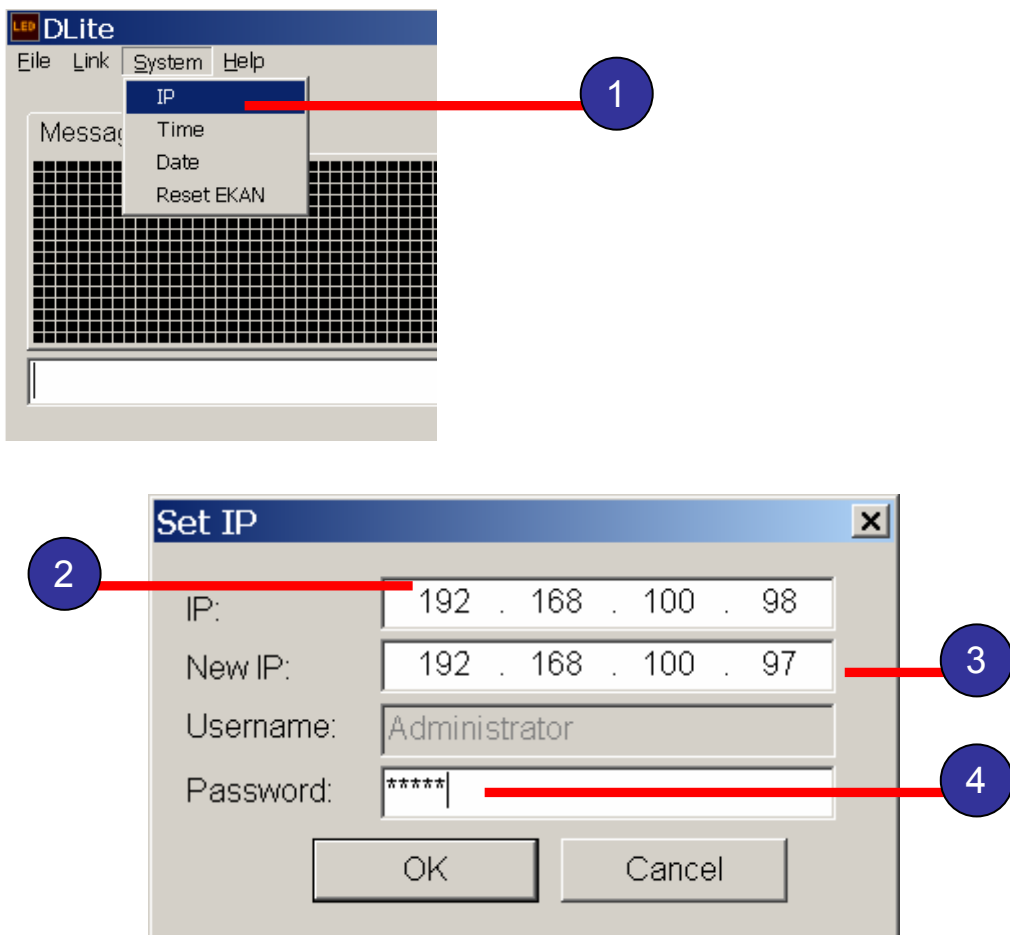


DLite user interface

## 1-3 LED Configurations

You could use the DLite message editor to modify original LED Display IP setting, please select the **[System]** from the file menu, then select **[IP]** command to setup IP address and other system setting.

If have IP conflict problem with other network device within your network, you could use DLite program to modify the LED Display 2IP setting, Please select the **[System]** then the **[IP]** to modify the IP address setting.



**Step 1:** Select the **[System]** then the **[IP]** item

**Step 2:** Enter the **old** IP address for LED display

**Step 3:** Input **New** LED Module IP address, in order to connect LED display via Ethernet.

**Step 4:** Input the password for LED, Default is " **admin** ", then press OK to update setting.



**About Date and Time setting for LED device**

You can also set Time/Date function using DLite message program or ICPDAS utility, like 7188xw or MiniOS7 utility. You can find detailed information on **Quick Start guide**.

You can also using the Web interface to set the IP address and password setting. All you need is type the <http://192.168.100.XXX> (the 192.168.100.XXX) is your system IP address. Then click on the "Option" link at the bottom of the messenger page.

Instant Message							
Repeat	Entering Effects	Message Text (max. 30 chars)	Delay (Sec)	Leaving Effects	Fore Ground Color	Back Ground Color	Speed
1	BLINK		1	BLINK	Red	Black	Normal
RESET		INSTANT MESSAGE					

Options      ~~Reset EKAN~~      **1**

If you want to clean all message on EKAN, you could using [**Reset EKAN**] let EKAN return factory setting.

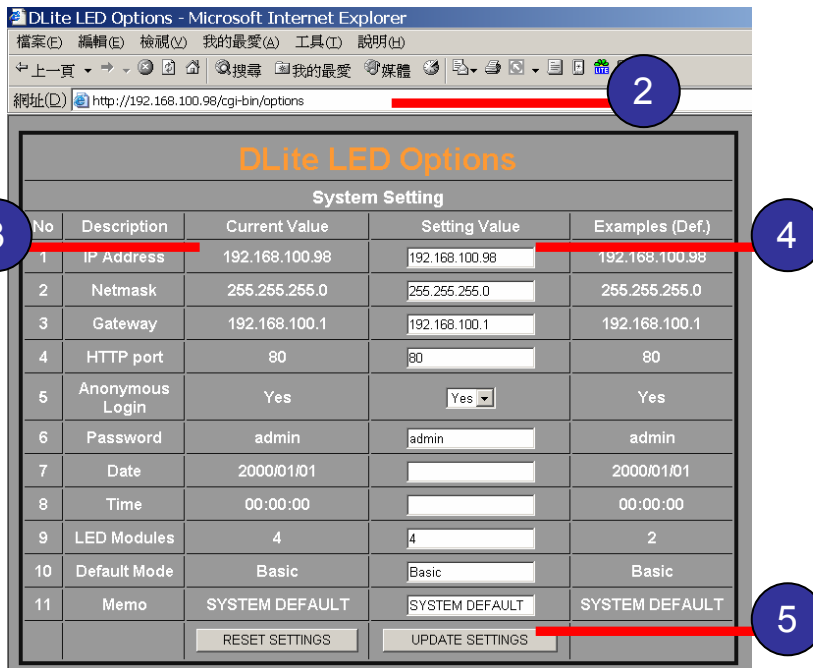


**The default IP address of DLite**

Default IP address of DLite is 192.168.xx.xx before you connect LED display's to your network, please make sure there is no other device using the same IP in the network right now. You could use init switch (need 10 seconds to reset) to reset factory setting of DLite display.



**Step 1:** At the bottom of the Web Messenger page



**Step 2:** Enter the Option page for system setting

**Step 3:** Original IP setting

**Step 4:** Type the IP setting or the password setting

**Step 5:** Click on Update setting, re-input the new IP address, enter the same page. you will see the applied effects.



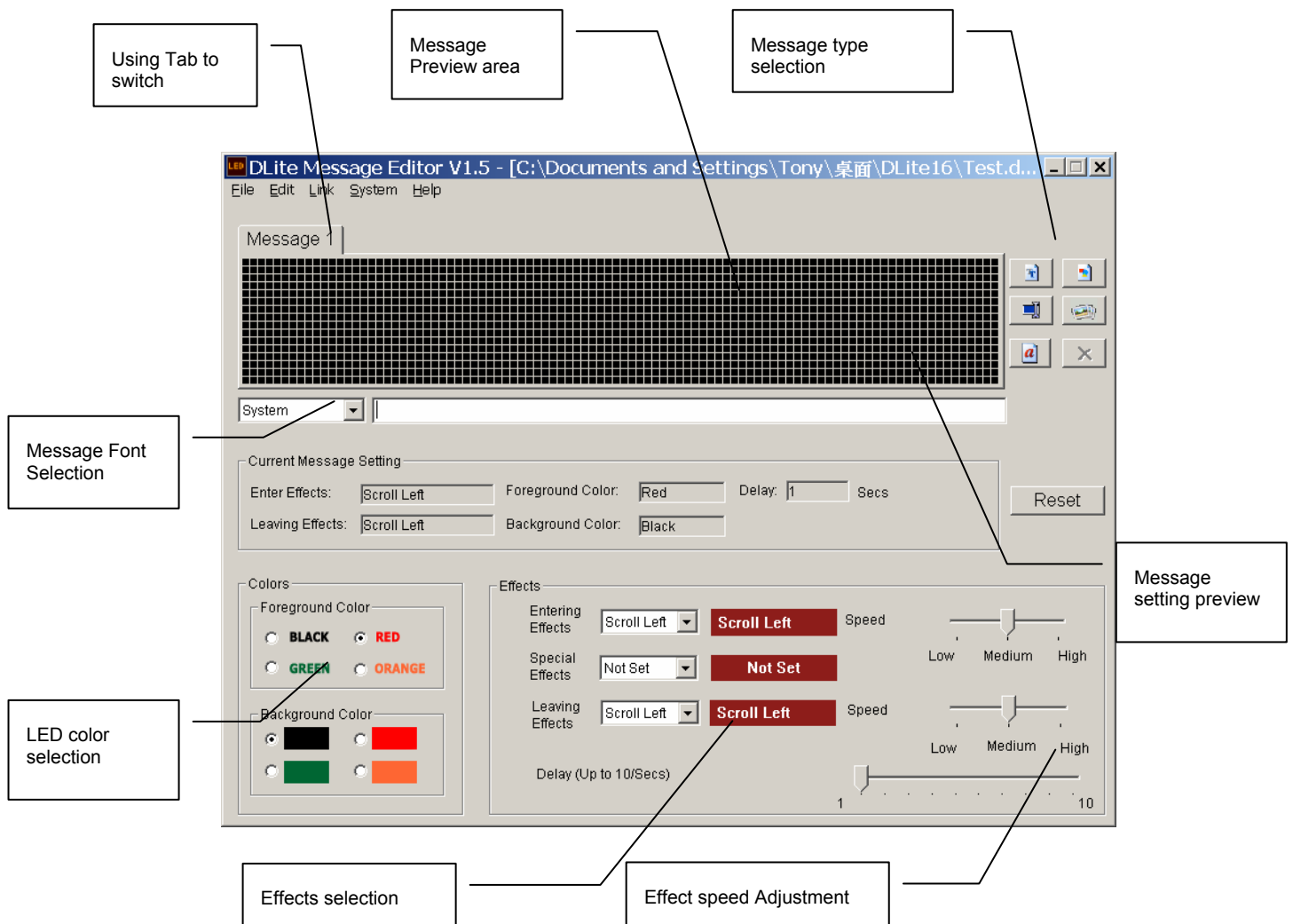
**Setup option address**

The default option address at <http://IP-address/cgi-bin/options> , if you familiar with HTTP protocol, you can create your own client to connect and manage the LED display setting though HTTP protocol.

## Chapter 2 Using Message Software

### 2-1 Introduction of DLite

DLite is an easy to use message editor for your LED; it provides basic message editing and message upload ability for DLite LED display.



It provides functions as follow:

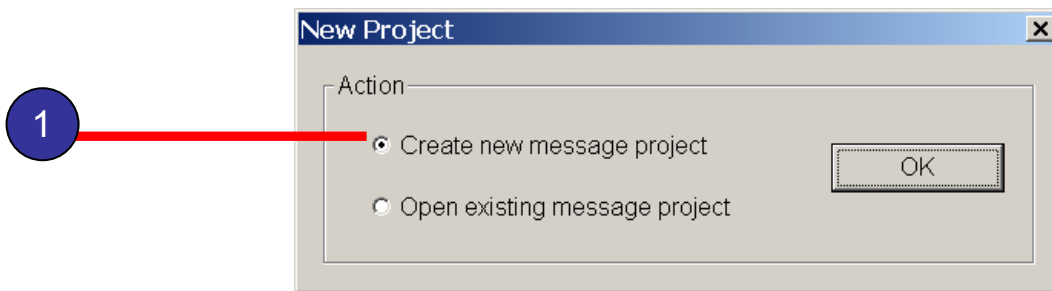
- **Message contents editing:** User could use the easy to use interface to edit the message that will be displayed on LED.
- **Apply message effects:** DLite provides 5 basic text animation effects for user, including **“scroll-left” “scroll-right” “scroll-up” “scroll-down” “Delay”**; user could use those effects to make text more interesting. User must click **[APPLY]** to confirm changes.
- **Load and Save message editing data:** User can save the edited data, or load edited data from previous saved files.
- **Upload message:** User could upload the message files after edited the message.
- **Configuration the LED device setting:** including IP address, Data and Time setting.

User could use those function to setup LED display and edit the message, following section will show you how to edit message then upload to LED display.

## 2-2 Edit your first message

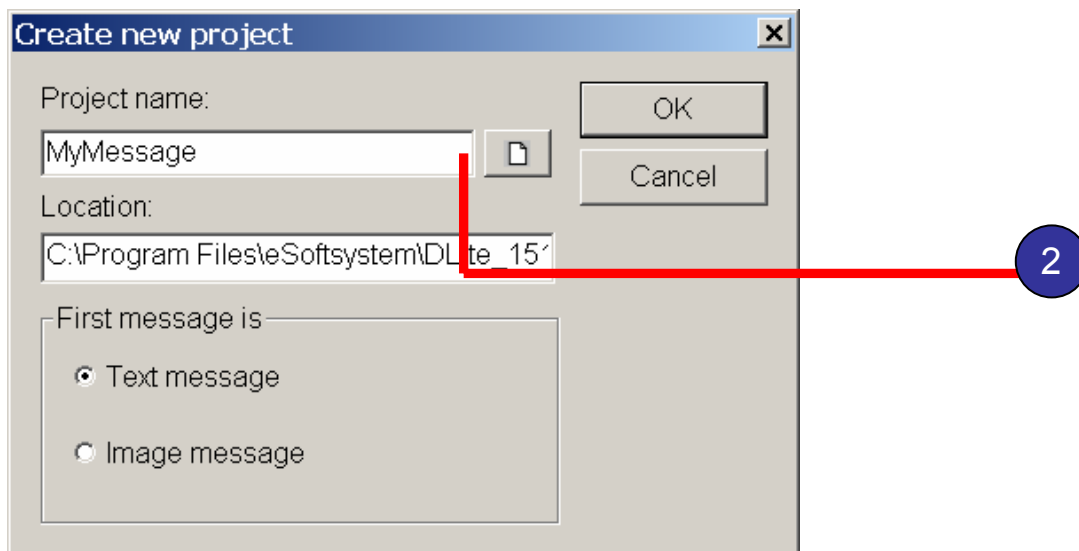
In this section, you will learn how to Edit and Upload your message to LED display.

**Step 1:** First, you will be asked that you want to create a new message project, or open existing message project. Please choose create new message project this time.

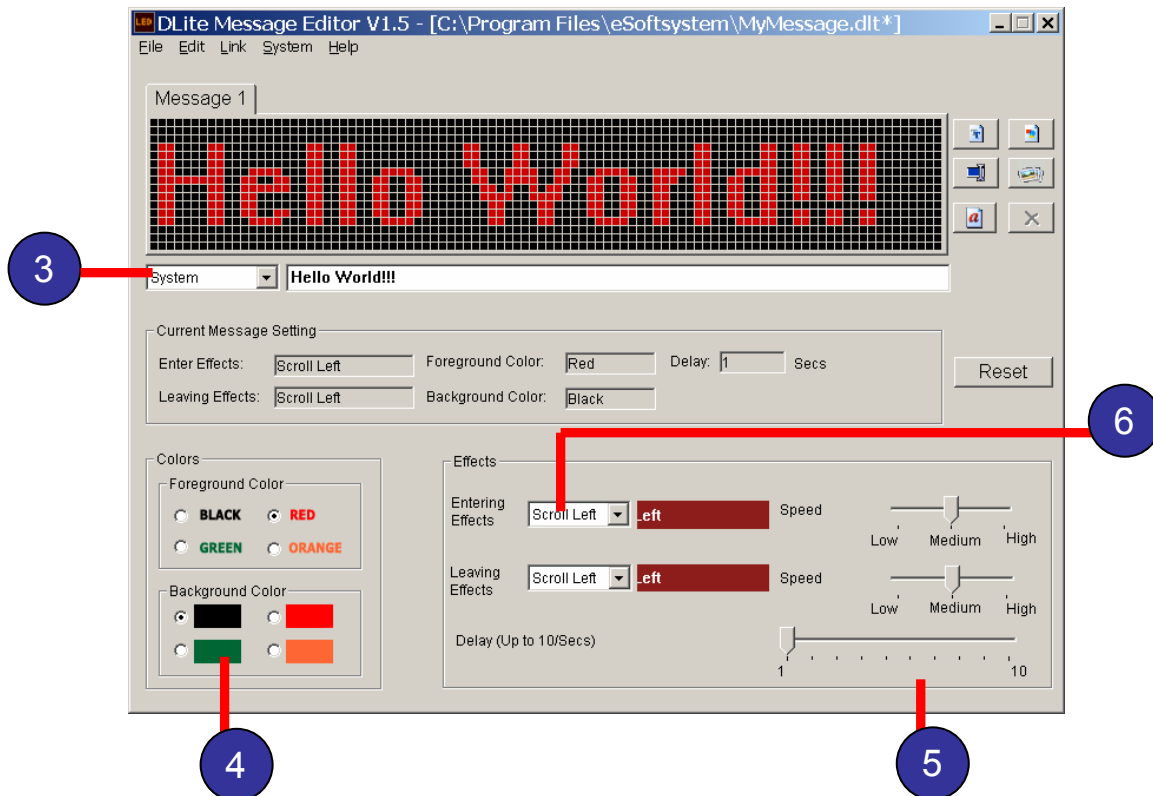


**Step 2:**

Enter the program; give the project name to MyMessage.



**Step 3:** Select your character font you want to use, and input your message in the message text box. Here we input "Hello World!"



**Step 4:** Select the background and foreground Color. We choose "Red" as foreground color and "Black" as background color

**Step 5:** Adjust message delay; we keep the delay for 1 sec here.

**Step 6:** Choose the scrolling effects of the message, we choose entering with **Scroll-Left** and leaving with **Scroll-Right**.

By using these easy steps, you finished the message editing process. If you need to add more messages, you can click on **[New Text]** button on the right side of preview screen to add new message.

Add more messages into the message edit screen



### **The limit for message**

The message editor's input text length was limited to **29** 2 byte characters (Chinese, Japanese. etc for example) or **58** English characters. You will see black screen if your text string is too long. And the total message in message editor could not be exceed 100.

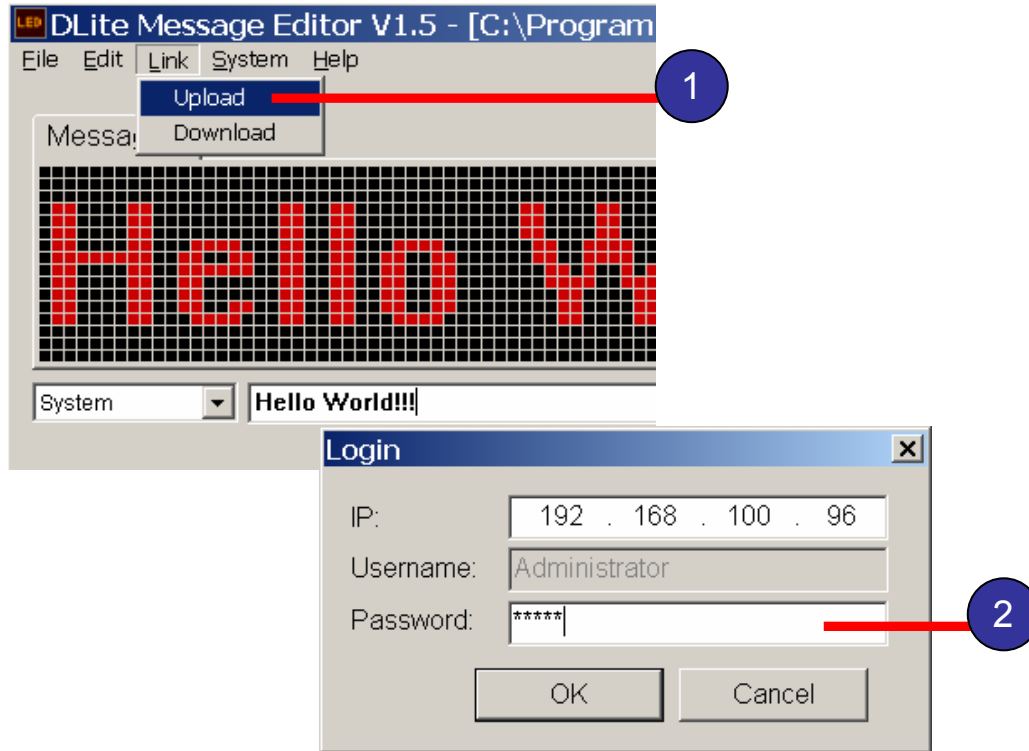


### **Using Message "Tab" to switch the message**

Each new message will be add on the message Tab, you can use those Tab to switch different message. The message

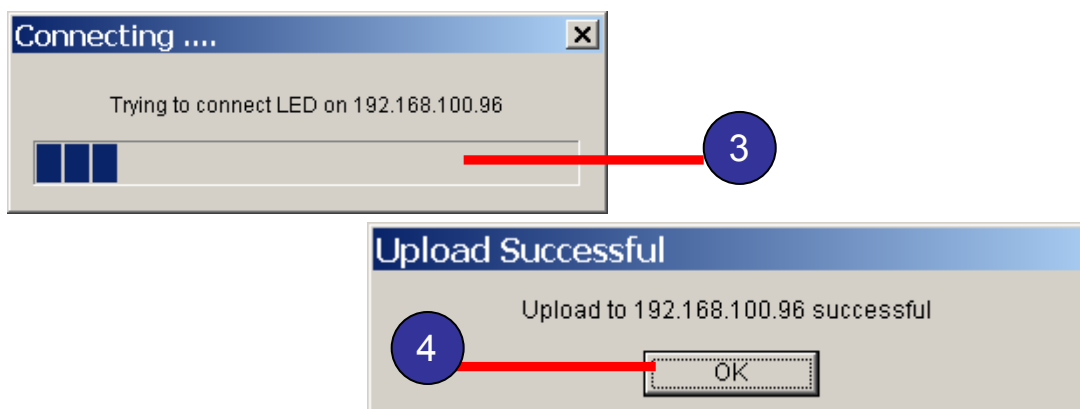
## 2-3 Upload data

You only need one step to finish the upload data work, please select the **[Link]** then the **[Upload]** command.



**Step 1:** Please select the **[Upload]** command from the **[Link]** menu.

**Step 2:** Input the IP address of the LED device, here we use "192.168.100.96" as an example, you can enter your LED device ID here, Default password for administrator is "admin", then Press **[OK]** Button.



**Step 3:** Waiting for connection.

**Step 4:** After making successful connection to device, will automatic start uploading, click **[OK]** after finished

You could see the LED automatic start rolling after upload finished.



**If screen display same static message after upload**

Because DLite will **keep the last online display data** (for those application that uses xDLite.ocx to send message) .The new message **WILL NOT** play until screen data is cleaned or you re-set LED device. You must use Web messenger send an **EMPTY** “instant message” to LED display (or API with Clear function). After you clean the screen, the LED will play that uploaded message scripts.



**The “Upload” is no response**

You must enter text message or bmp files to your message project, then “**upload**” button in the menu will display the upload dialog box.



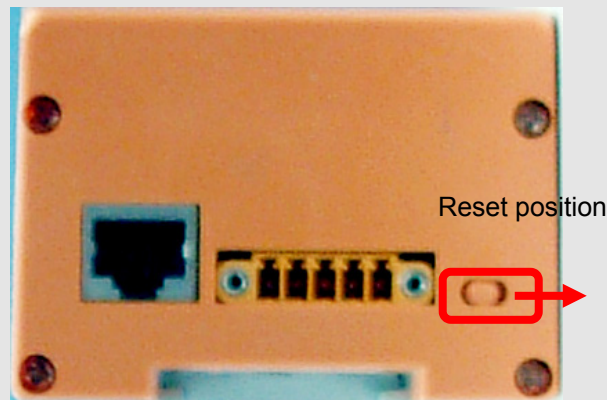
## **2-4 Check LED display**

After message successfully uploaded, EKAN LED will automatically start the new message script display.

**BUT**, if you had to use API to send online message, or use Web messenger to send instant message, the uploaded script won't automatic start display newly uploaded messages. Until you send a blank instant message or use API to send clear screen command.

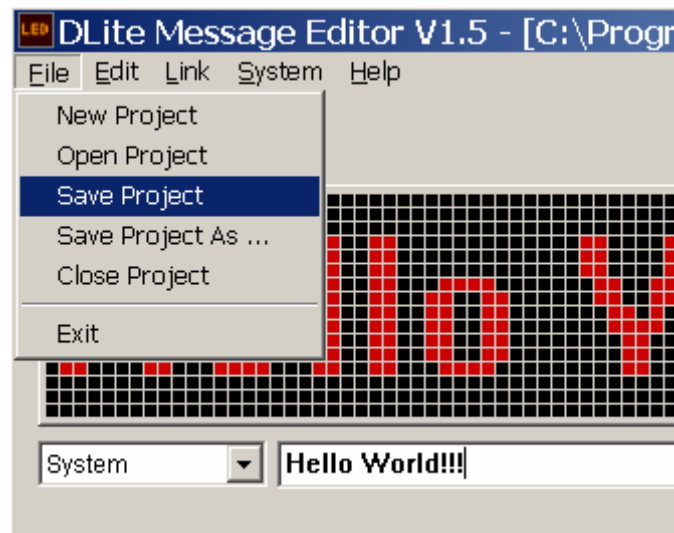
### **STOP How to soft reset DLite LED display**

You can use the init switch to reset DLite display into factory preset mode. The **init switch** is located at same side of network socket. You can switch to network socket side for **10 seconds**, than the DLite will clear all message and configuration data, and then into factory preset mode. Please remember **switch the init button back after soft reset**.

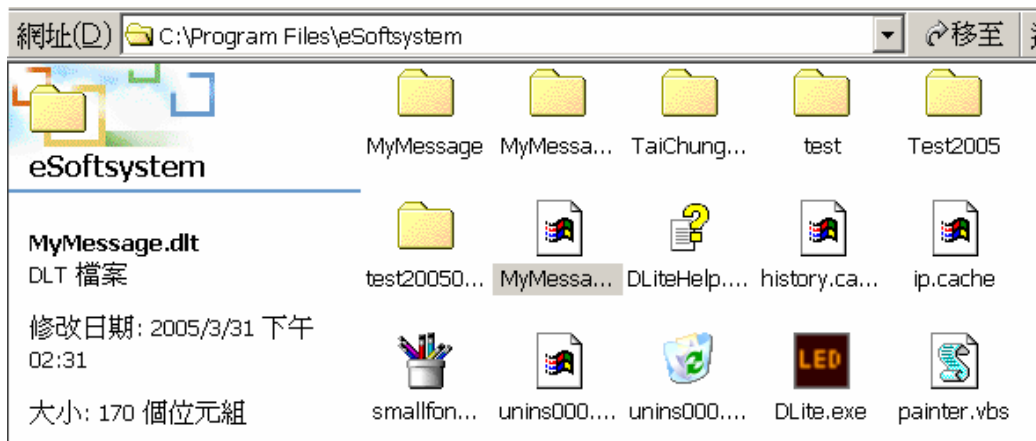


## 2-5 Save message data to file

Once you finish the message editing function, you could save the edit result to file for later use. Click the **[File]** Menu then select save to finish the edit process.



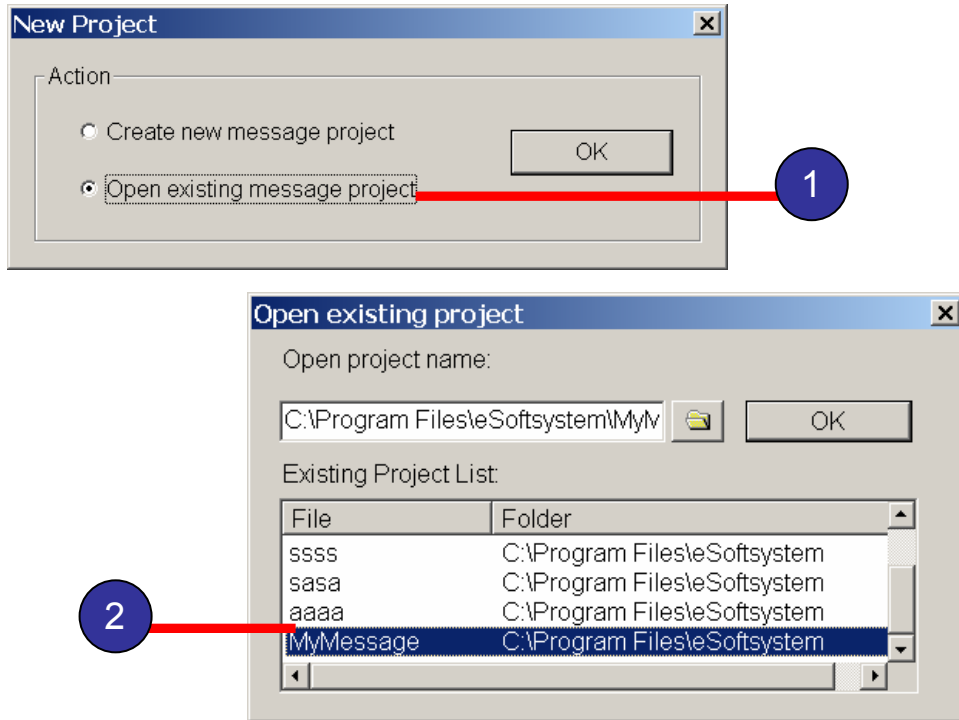
Save the Data to files



Default name of the file is the name of the Project + .dlt extension, location is at folder /projectname

## 2-6 Load message data from file

If you had saved the data file before, you could reload it from the .dlt file. After enter DLite main program, choose **[Open existing message project]**.



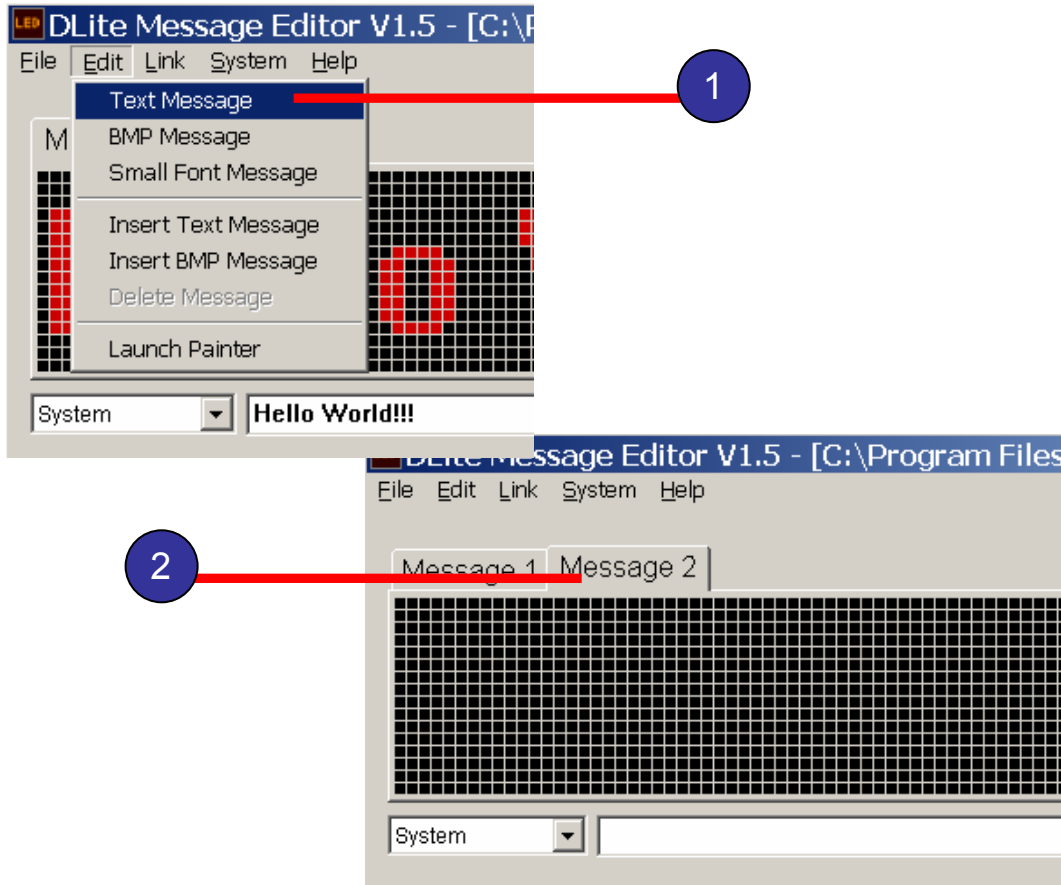
**Step1:** Choose **[Open existing message project]**

**Step2:** Choose saved "MyMeesage" message file.

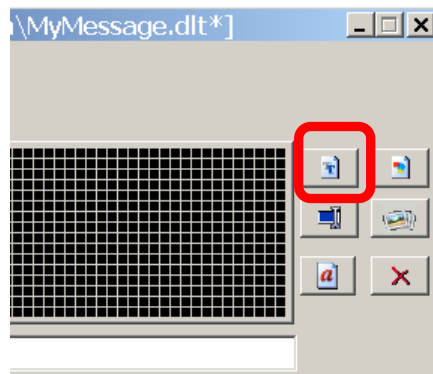
After file successfully reloaded, continue edit the existing project.

## 2-7 Add/Insert/Delete message

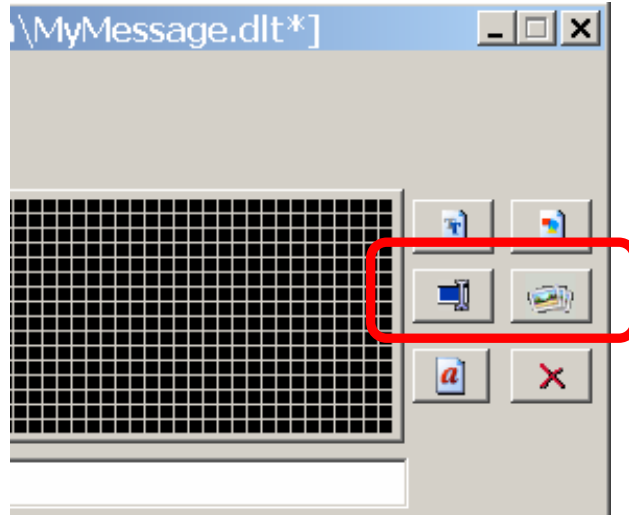
You can add more message into DLite editor by using **[File]** then the **[New Text Message]** Command, New TAB will be add in to editor window.



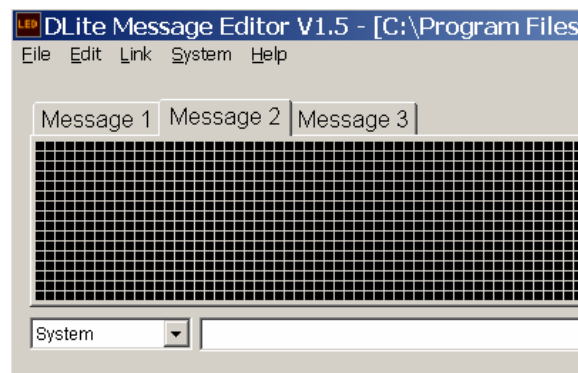
Or you can simply press **[New Text]** button to add new text message.



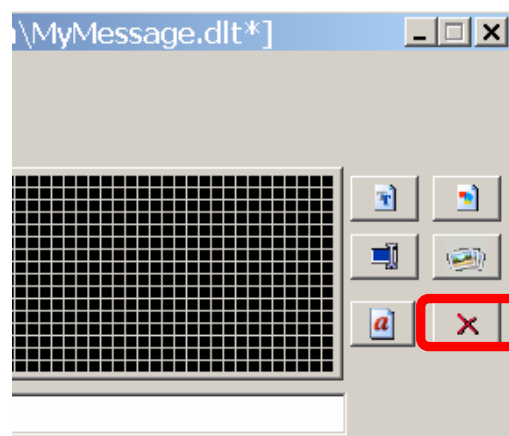
You can insert a Text message or BMP message by click **[Insert Text]** or **[Insert Bitmap]** button, the new tab will be shown before current selected page.



The new Tab will be shown right before current editing tab.

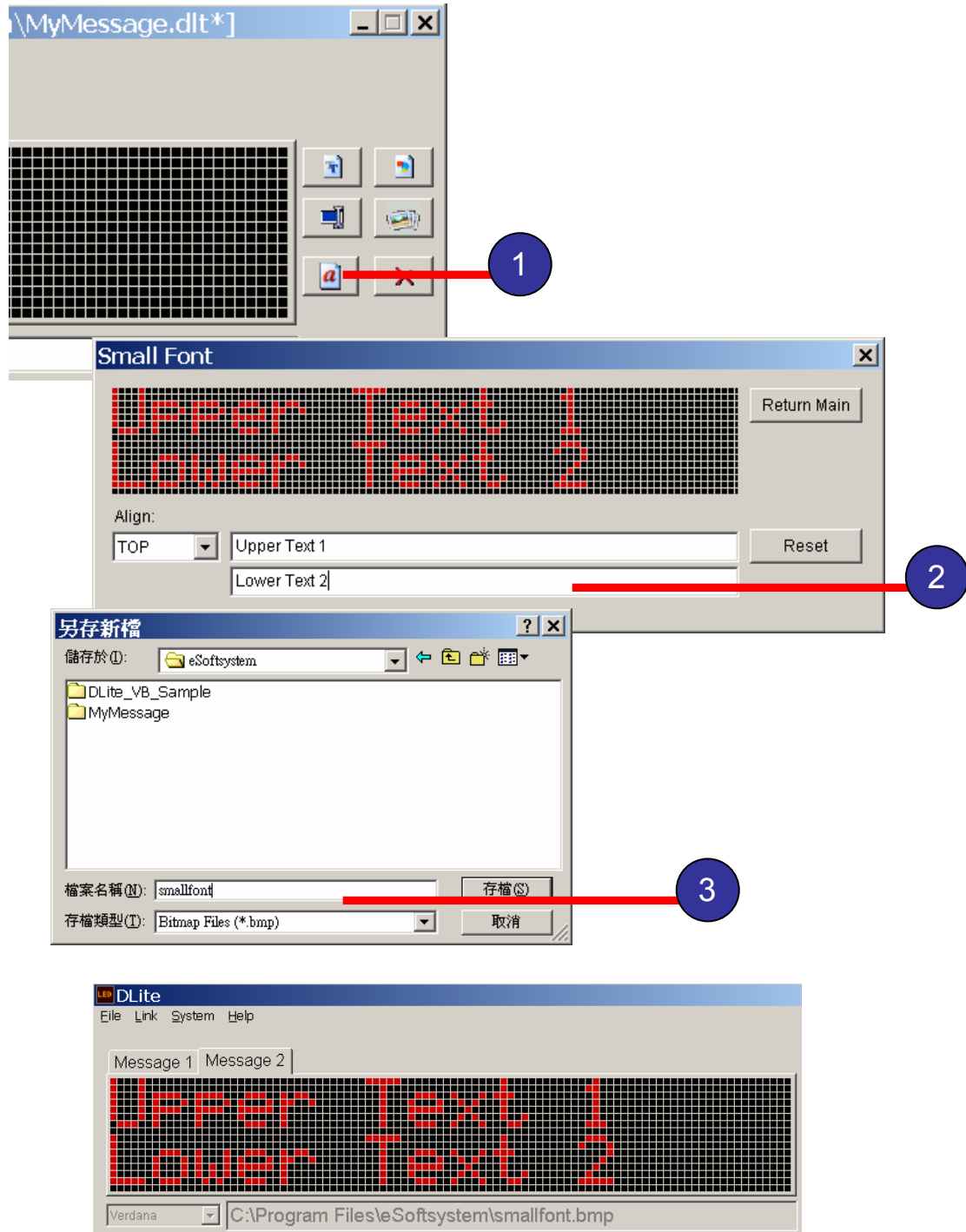


Delete the messages; you could simply click the [Delete] button on LED.



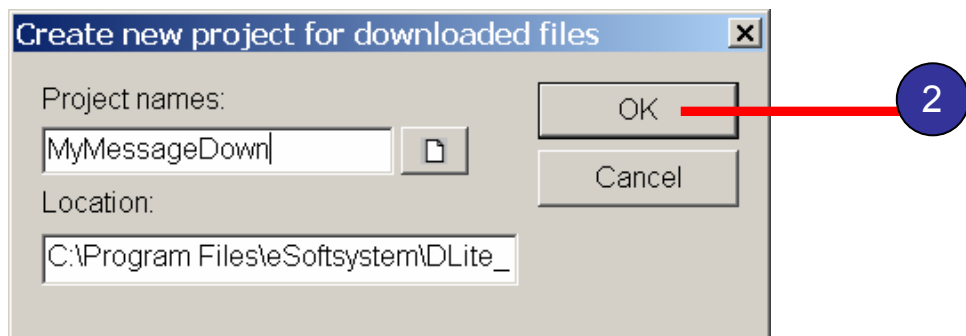
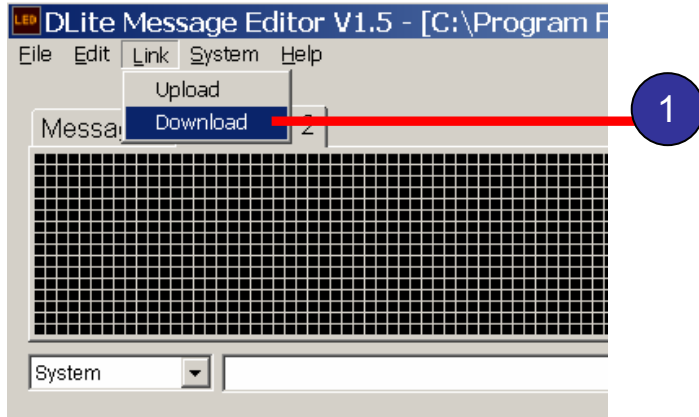
## 2-8 Add small font message

You can add more messages into DLite editor by clicking the **[Small Font]** button on the screen. Select align **[Top]** to input 2 lines of message. Then press **[Return Main]** to save the message with file name. You will see the small font text on the message editor.



## 2-9 Download message from LED display

You can download messages from LED display. Then you can select the download directory before message download.



You can download the script then upload back to LED display. Or use the text based script editor to edit the script.



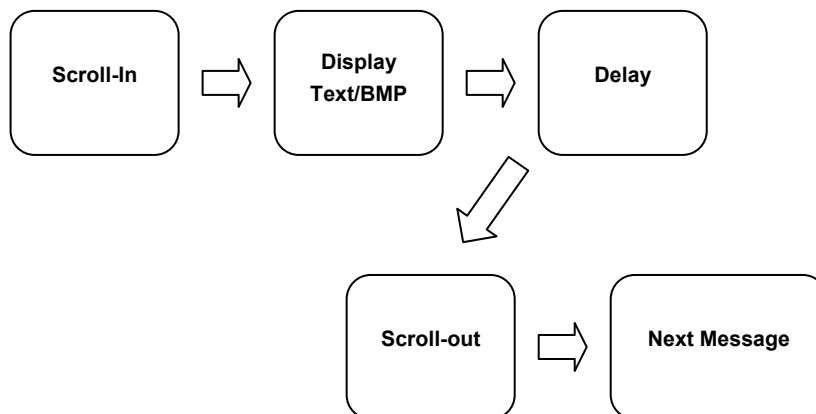
## Chapter 3 Effect editing

### 3-1 Basic Effect types

There are 5 basic effects parameter supported by DLite message program, which is:

- **Scroll Left:** Text will be scroll from right of the LED sign to left of LED sign.
- **Scroll Right:** Text will be scroll from left of the LED sign to right of LED sign.
- **Scroll Up:** Text will be scroll from downside of the LED sign to upside of LED sign.
- **Scroll Down:** Text will be scroll from upside of the LED sign to downside of LED sign.
- **Delay:** Text will be scroll from left of the LED sign to right of LED sign.

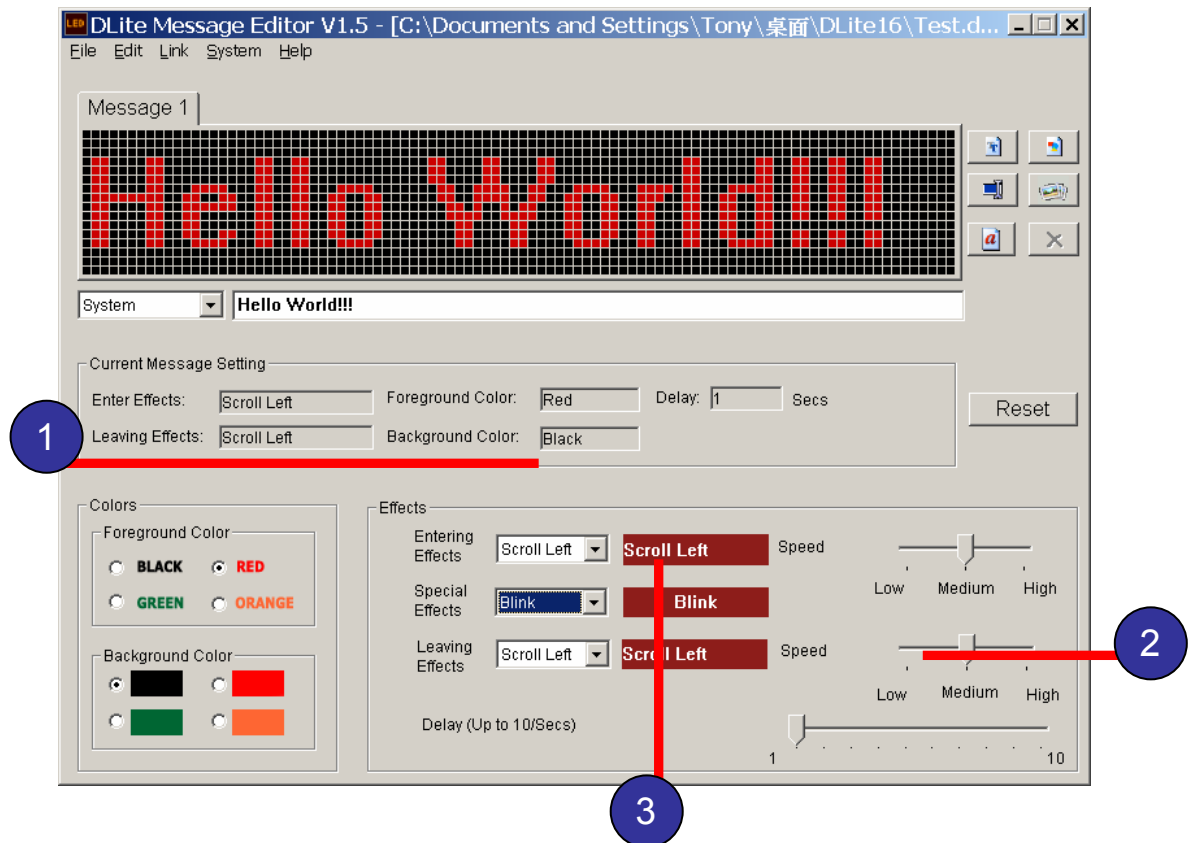
You can choose the proper effect to decorate your system. The sequence of the effect is like:





### 3-2 Applying Effects

You could choose the effects, DLite will automatically apply the effect settings



**Step 1:** Select the effects you want.

**Step 2:** Adjust the effect speed.

**Step 3:** You could see the result on the preview screen

## Chapter 4 Graphic data editing

### 4-1 What is BMP file

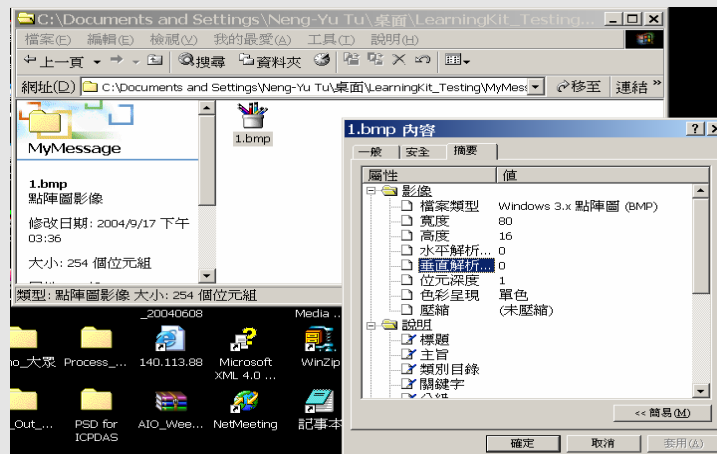
Bitmap is array of bits represent color of each pixel in the rectangular graphic array. Each bits in the pixel is represent pixel color. The BMP format used by DLite is 1 bit BMP or so called indexed BMP. It's only need 1 bit to represent graphic dots, instead of using bigger bitmap file format (32/24/16/8 bits).

EKAN LED **IS** using the windows standard 1-bit indexed bmp file to display message.



#### How to identify right format BMP

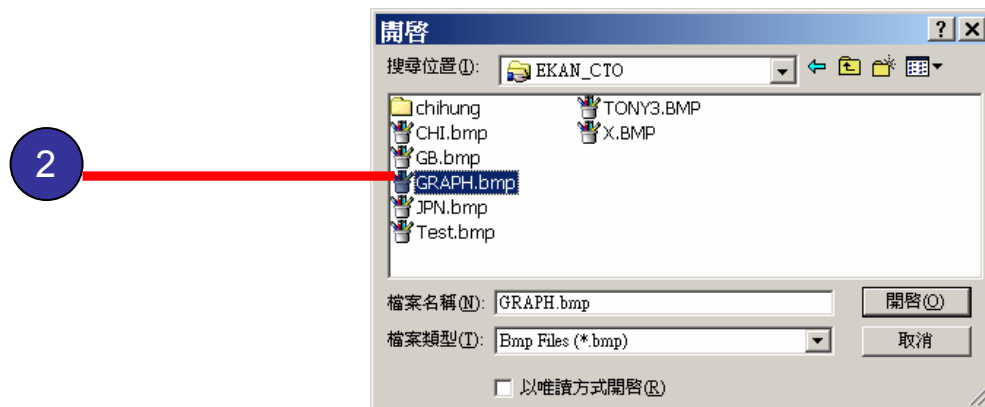
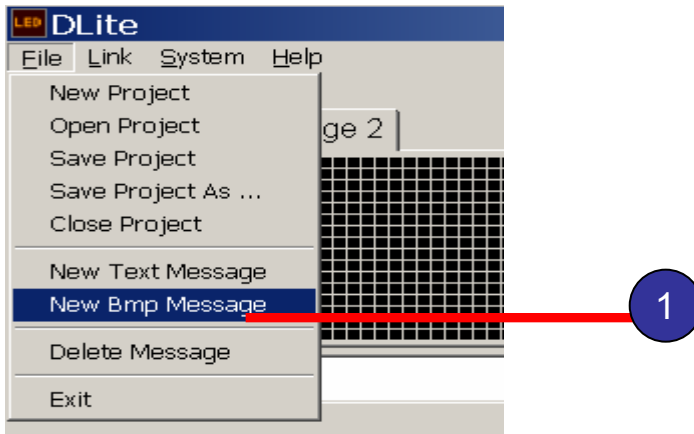
There is various different types of BMP, you can **right-click** on a BMP file and using context menu to see the file property. The property we use now is show in fig.



The BMP format should be Windows 3.x BMP

## 4-2 Load BMP into DLite

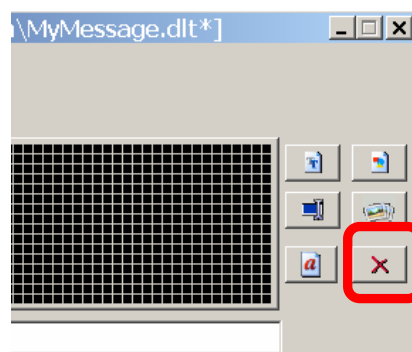
Please use the **[File]** and **[New BMP Message]** command to load BMP file.



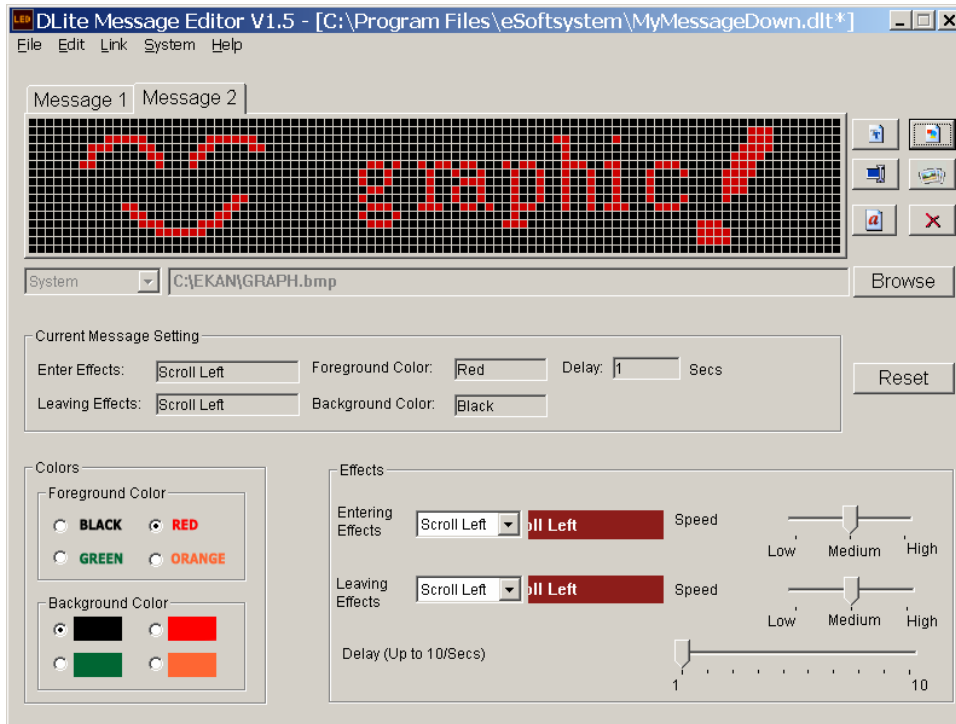
**Step 1:** New a BMP file

**Step 2:** Select a correct type BMP

Or you can use **[New BMP]** button on the right side of application screen.



If the BMP message is correct, the content should be shown on the screen, shown as below:



A BMP message was loaded, and the directory will be listed in textbox.

If file format is wrong, there will be a dialog

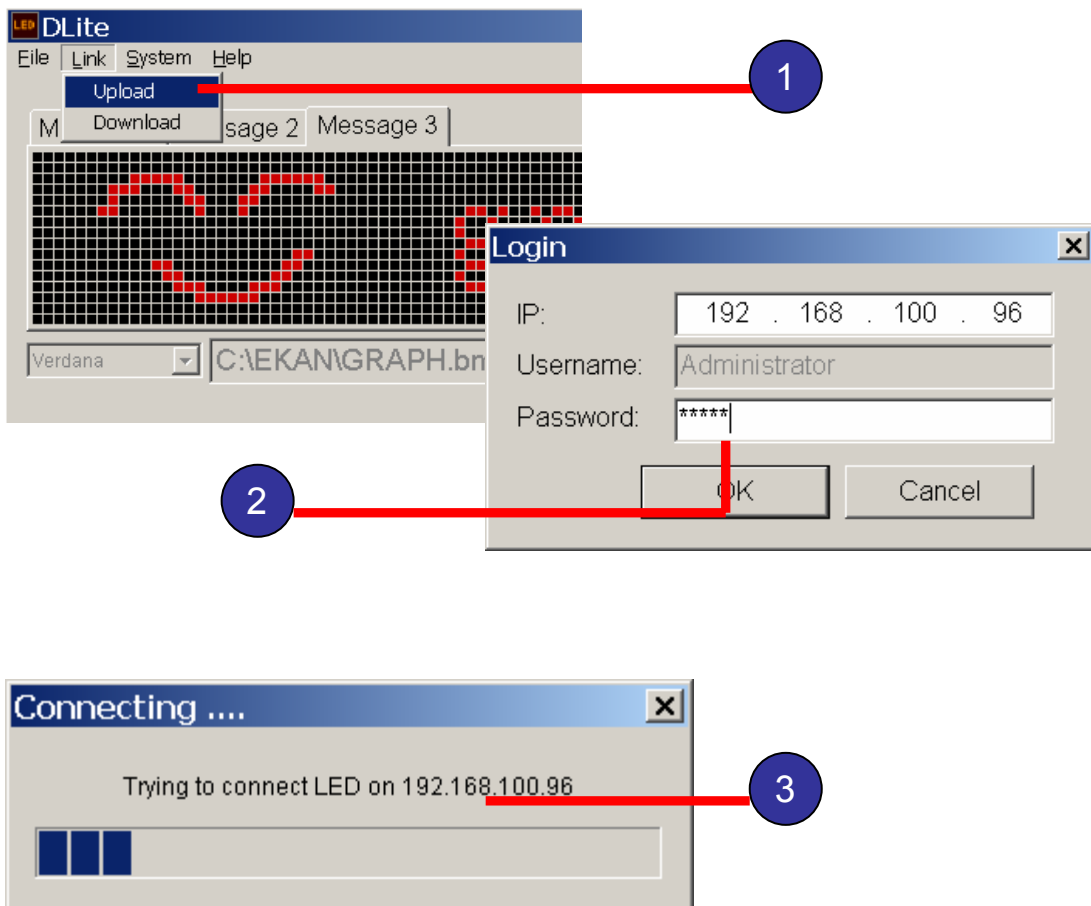


If the file format is wrong, this dialog will be shown

You can still use color and other effects setting to control the graphic effects.

### 4-3 Upload BMP message

Please select **[Link]** and use the **[Upload]** to upload the BMP message. Then input the IP address and the default address. The BMP file will be automatically uploaded to LED device. The Process is same as upload text based message.



**Step 1:** Please select the **[Upload]** command from the **[Link]** menu.

**Step 2:** Input the IP address of the LED display, here we use "192.168.0.99", you can enter your LED display ip here, then Press **[OK]** Button.

**Step 3:** Waiting for connection.

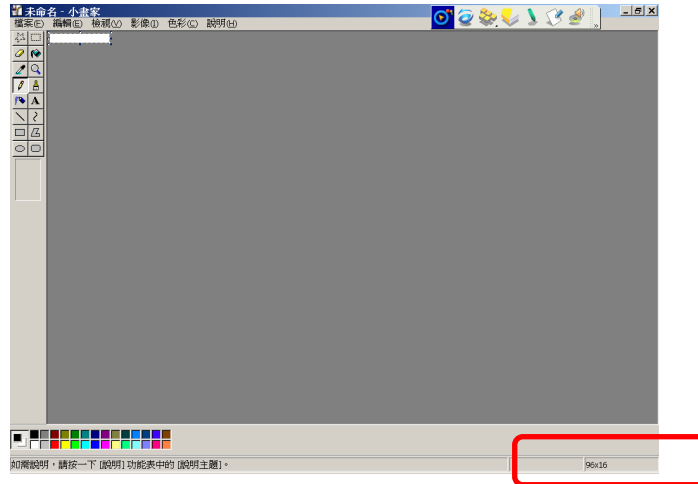
After making successful connection to device, will automatic start

uploading, click **[OK]** after finished

After successful upload, the program will show the BMP in the user interface.

## 4-4 Create BMP by using graphic applications

You can use third party graphic application to edit the BMP file. The file format should be 16 pixels high and 96 pixels wide for per DLite LED display. For windows painter:

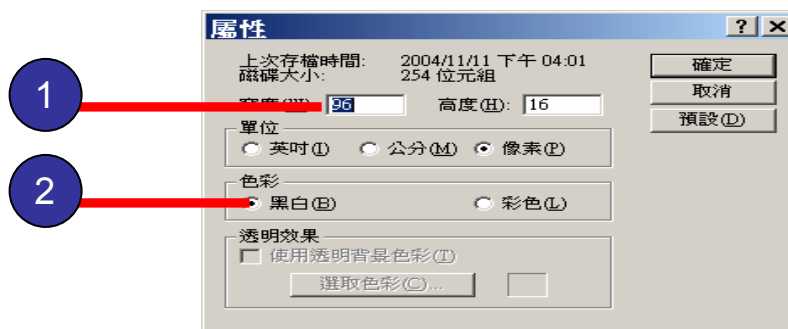


The graphic size shows on downside, right corner

You could use 3 command to add great support from Microsoft Paint utility.

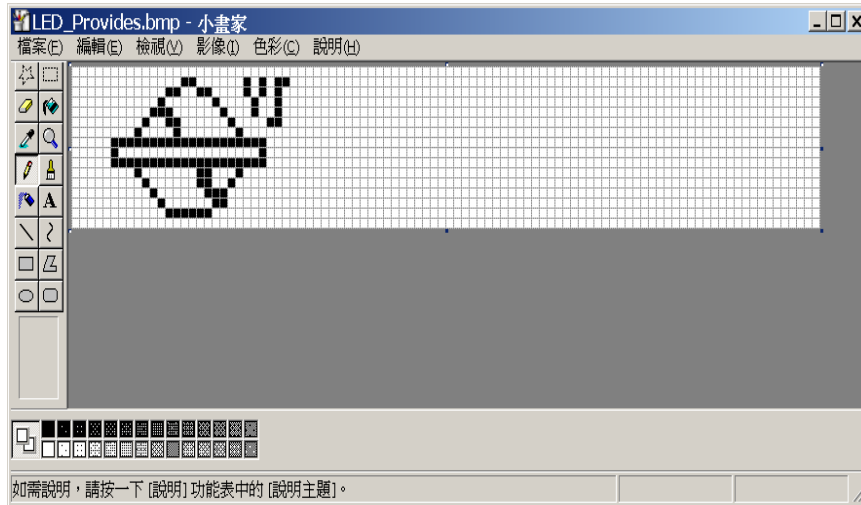
### [Ctrl+E] Setting BMP Size and Color schema

1. Configure the BMP size to 96 pixels wide and 16 pixels height.
2. The color to Black and White.



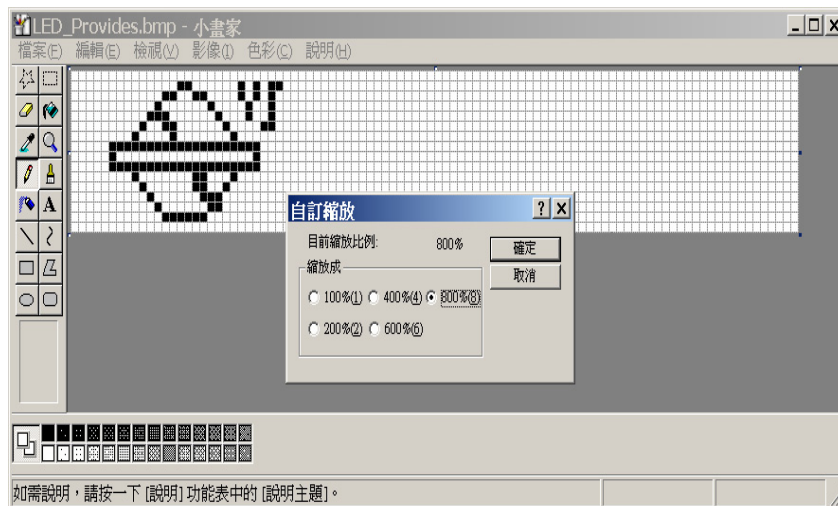
## [Ctrl+G] to Show Grid

Using **Ctrl+G** or [**View/Zoom/Show Grid**] to show Painter's gridlines.



## [Zoom] Zoom in the BMP file

Using [**View/Zoom**] to zoom in the bmp size, you can use custom setting to get the bigger size.



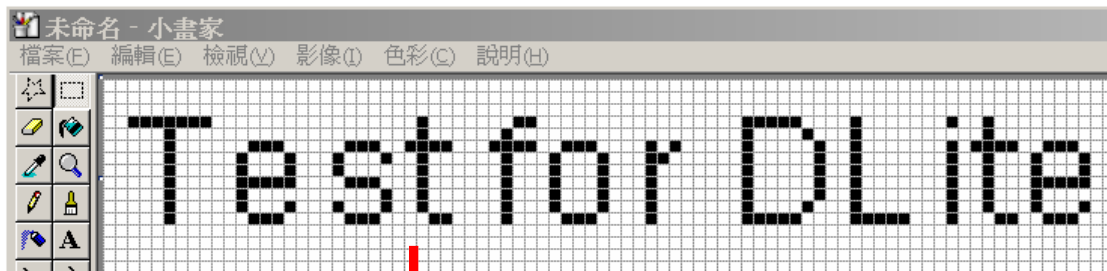
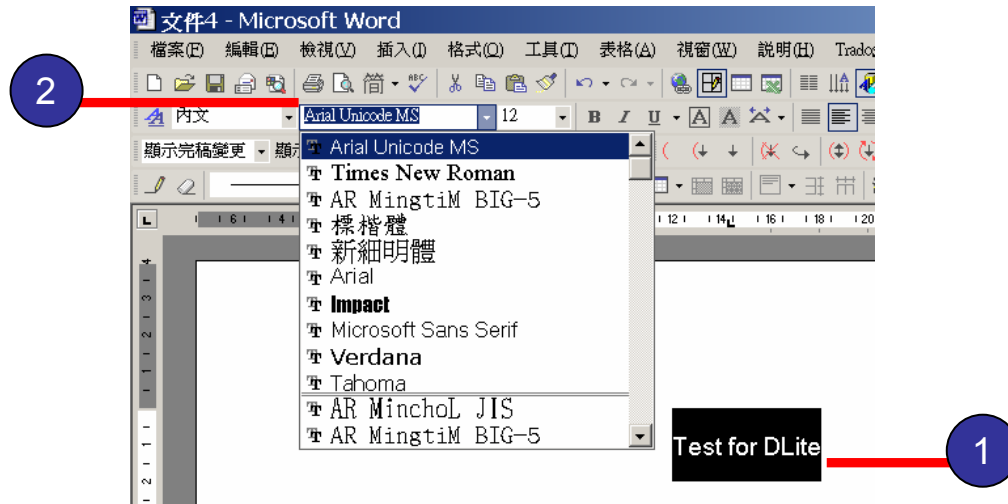
You can use copy paste from Microsoft Word or other application to create your BMP image. If you want multi-Language support, in the Microsoft Word, you must using **Unicode** based font character.

**Step 1:** Enter the text you want to convert.

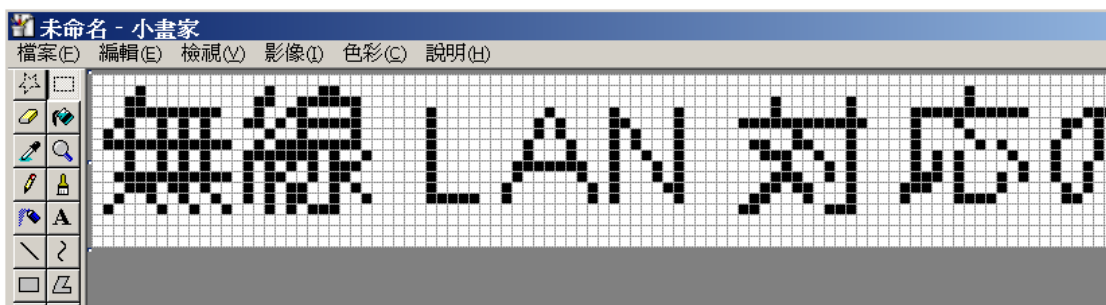


**Step 2:** mark the word, and change the font to **Arial Unicode MS** if you need multi-language support.

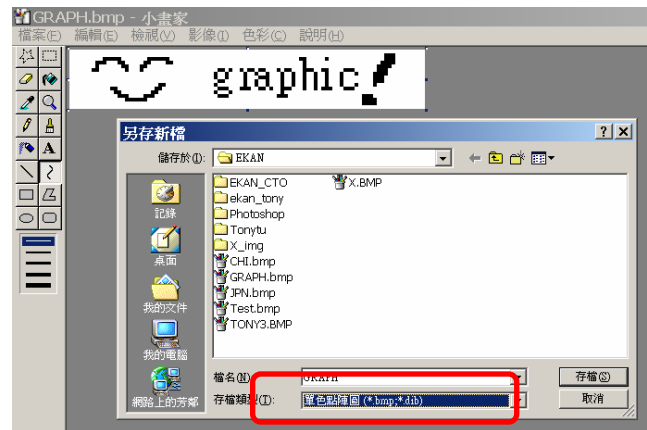
**Step 3:** Press **Ctrl-C** to copy it, and using **Ctrl-V** to paste to Painter.



Or like Japanese text:



After graphic editing finished, you could save the BMP file to **1-bit BMP (single color BMP)** format, if you use more than 1 color, there will be a message box acknowledge you might lose the graphic information during conversion. Please **“Accept”** those data lose during conversion.



### Using other graphic editing tools

You can use more powerful graphic editor like Adobe Photoshop or illustrator to make 1-bit bmp files. Some simple icon editor around the internet is also a good choose for this type of image.



### The sample BMP files location

There is some sample BMP files located under installation directory, /SampleBMP folder

## Chapter 5 Web messenger

### 5-1 What is web messenger?

Web browser is most common type of user interface that access internet or intranet resource nowadays. DLite also provides Web interface to access message and management function. You can post newest message or update system configuration via TCP/IP network with the Web browser like Internet Explorer.

### 5-2 Edit and update message using web browser

Before you using the Web Interface, you should make sure the network you use should be properly configured. If you access the LED via local lan environment, here is the simple check list:

- The IP address of DLite LED
- Mask setting
- Your computer's IP setting
- Your computer's mask setting

You can use ping command to make sure that DLite LED's IP address.

DLite LED Web Messenger							
Messages List							
No	Entering Effects	Message Text (max. 30 chars/slot)	Delay (Sec)	Leaving Effects	Fore Ground Color	Back Ground Color	Speed
1	SCROLL LEFT	My First Message	1	SCROLL LEFT	Green	Black	Normal
2	SCROLL LEFT		1	SCROLL LEFT	Green	Black	Normal
3	SCROLL LEFT		1	SCROLL LEFT	Green	Black	Normal
4	SCROLL LEFT		1	SCROLL LEFT	Green	Black	Normal
5	SCROLL LEFT		1	SCROLL LEFT	Green	Black	Normal
6	SCROLL LEFT		1	SCROLL LEFT	Green	Black	Normal
7	SCROLL LEFT		1	SCROLL LEFT	Green	Black	Normal
8	SCROLL LEFT		1	SCROLL LEFT	Green	Black	Normal
9	SCROLL LEFT		1	SCROLL LEFT	Green	Black	Normal
10	SCROLL LEFT		1	SCROLL LEFT	Green	Black	Normal
RESET		UPDATE MESSAGES					

**Step 1:** Please input " http://192.168.0.xx " (xx is your ip address) on your browser

**Step 2:** Wait for the web page download

**Step 3:** Message input interface

- Input the message**
- Select scroll-in effects**
- Delay of the message**
- Select scroll-out effects**
- The color of the message text**
- The speed for display**

Web messenger only support 10 messages, total message characters was limited, about **320 characters** (or **80 Chinese characters** by 4 bytes unicode).

After you change the setting, you could simply click the UPLOAD button to upload the message setting you just made.

You will see the message on the LED display after you successfully upload.



**You can modify the HTML page if needed**

DLite 1.5 using standard HTML file for the message input, you can edit the HTML file by standard HTML editing tools. If you familiar with http protocol, you can direct send http command to CGI program to bypass the html page to update the message.

### 5-3 Priority message (Instant message)

Priority message can be treated as some kinds of emergency message or alert message. After you upload the priority message, It will interrupt current display immediately, then loop the message if needed.

You could input the priority message at bottom of each message process page.

Instant Message							
Repeat	Entering Effects	Message Text (max. 30 chars)	Delay (Sec)	Leaving Effects	Fore Ground Color	Back Ground Color	Speed
1	BLINK		1	BLINK	Red	Black	Normal
RESET		INSTANT MESSAGE					

Priority message have 2 different states, first one will only play priority message once, and second one will loop play priority message until upload new messages.



#### How to let LED return message play list

You can send a “**blank**” message on the instant message field, then the LED will clean the message on the LED display and back to message play list.

## 5-4 System Management function on Web browser

Bottom of DLite Web Messenger has a option link, to the system configuration page, you can change the following setting:

DLite LED Options				
System Setting				
No	Description	Current Value	Setting Value	Examples (Def.)
1	IP Address	192.168.0.94	<input type="text" value="192.168.0.94"/>	192.168.0.94
2	Netmask	255.255.255.0	<input type="text" value="255.255.255.0"/>	255.255.255.0
3	Gateway	192.168.0.1	<input type="text" value="192.168.0.1"/>	192.168.0.1
4	HTTP port	80	<input type="text" value="80"/>	80
5	Anonymous Login	Yes	<input type="text" value="Yes"/>	Yes
6	Password	admin	<input type="text" value="admin"/>	admin
7	Date	2005/1/29	<input type="text"/>	2000/01/01
8	Time	9:19	<input type="text"/>	00:00:00
9	LED Modules	2	<input type="text" value="2"/>	2
10	Default Mode	Basic	<input type="text" value="Basic"/>	Basic
11	Memo	SYSTEM DEFAULT	<input type="text" value="SYSTEM DEFAULT"/>	SYSTEM DEFAULT
		<input type="button" value="RESET SETTINGS"/>	<input type="button" value="UPDATE SETTINGS"/>	

Function name	Default value	Description
IP address:	192.168.0.100	Set the LED master module IP address
Mask:	255.255.255.0	Set the LED master module IP mask

Gateway:	192.168.0.1	Set the LED master module gateway address
Web port:	80	Set the LED master module port for web configuration interface.  Default port is 80 for HTTP protocol, you may change if needed.
Anonymous Login:	Yes	Is allowing anonymous user to login into system. If "No" is set, You will be prompt to enter username and password on next time login. The default username is "Admin", password is "admin"
Password Setting:	Admin	Set the password of API/Web login interface.
Date Setting:		Set Date, format is "2005/12/10".
Time Setting:		Set Time, format is "22:12:10"
LED module used:	2	Current panel number that connected to the EKAN LED display. Default panel is 2 LED, maximum number is 8 (1 Master module with 7 slave modules).
Default Mode:		Not used in DLite 1.5

Memo:		User could writing the memo for system setting.
RESET SETTINGS:		The Web page will reset the web page data to initial web page value.
UPDATE SETTINGS:		Update the setting to EKAN system.

And you can see following system information on the page:

System Information	
DLite Firmware Version	v1.5.57
Support Fonts	8x16, 5x7 ASCII



**You can direct connect CGI page if needed**

The option page located [http://192.168.0.100\\_\(Your IP Address\)/cgi-bin/options](http://192.168.0.100_(Your_IP_Address)/cgi-bin/options) you can direct connect this address to modify your pages. If you familiar with http protocol, you can send required parameter to set the system setting.



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## **About eSoftsystem Corp.**

**eSoftsystem Technology Corp.** is the most innovative embedded solution provider. It has built up a team of world experts in embedded software and hardware systems to provide customer high-performance and high-quality embedded solution product and services.