User's Manual

DL-Gates

Foreword

This user's manual contains useful information about the precautions, functions, and operating procedures of the DL-Gates program that is downloadable from **http://www.yokogawa.com/tm/tm-softdownload.htm**. To ensure correct use, please read this manual thoroughly during operation.

After reading the manual, keep it in a convenient location for quick reference whenever a question arises during operation.

For information about the handling precautions, functions, and operating procedures of   the DL series digital oscilloscopes, and the handling and operating procedures of Windows, see the manuals that accompany the particular instrument you are using.

Notes

• The contents of this manual are subject to change without prior notice as a result of continuing improvements to the instrument's performance and functions. The figures given in this manual may differ from the actual screen.

• Every effort has been made in the preparation of this manual to ensure the accuracy of its contents. However, should you have any questions or find any errors, please contact your nearest YOKOGAWA dealer.

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Product Overview

Functions

As one of PC-based software utilities for DL series oscilloscope, DL-Gates provides users file transfer function, with which users can download file and upload file from DL scope and observe the thumbnail of image file of DL series oscilloscope.
The main window looks like fig0

- Display file system of DL, display file system of local PC, display transfer log.
- Thumbnail, small icon, list, detail display files of DL.
- Download or upload files between DL and local PC.
- Delete files or create new folder .
- Connect to multiple DLs at the same time. (Maximum 4 DLs)
- Auto connect according to last connection when start application
- Save window size and position when close application.
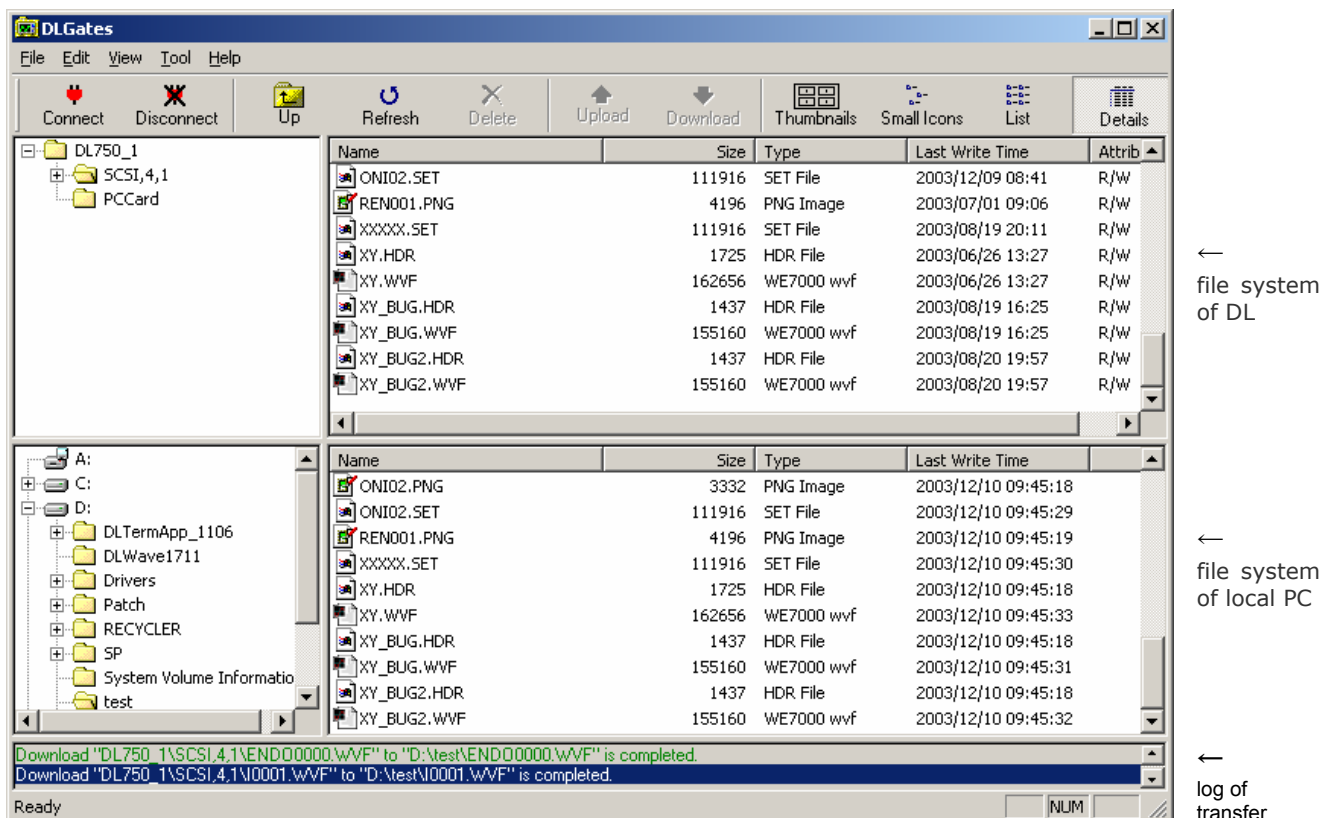- Setting thumbnail size: 216*160, 200*150, 108*80, 56*40.

fig0   Main Window of DL-Gates

PC System Requirements

PC
PC capable of running Windows 2000, Windows Me, and Windows XP with at least a Celeron 700 MHz processor and at least 128 MB of memory (256 MB or more recommended).

In addition, a USB driver for the connected DL is required. For details on the USB drivers, see the user's manual for the relevant DL.

CRT, printer, and mouse
Display: SVGA/XGA (XGA or better recommended)
Color: 65536 colors or more
Must support Windows2000, Windows Me, and Windows XP.

GP-IB Board
When using the GP-IB interface, GP-IB board by National Instruments or a PCMCIA card is required.

Firmware Version of the DL Series Required for Operation
DL750:   Version 4.01 or later
DL1600 Series :   Version 1.13 or later
DL7400 Series :   Version 1.32 or later

Notes on Using the Software

Exemption from Responsibility

Yokogawa Electric Corporation shall not be held responsible by any party for any losses or damage, direct or indirect, caused by the use or any unpredictable defect of the product.

Precautions Concerning the Use of the Software

• Do not perform operations directly on the DL series digital oscilloscopes while using this software program. Doing so can lead to erroneous operation.
• If the standby mode provided on your PC is activated, the operation of the software may not be able to continue.
When using the software, turn OFF the standby mode.
• If you run the software using a LAN interface, the line load is 1 Mbytes/s maximum. Consult your network administrator on using the LAN interface.
• If a connection error occurs when connecting to a DL digital oscilloscope, power cycle the DL.

1. Connection to DL

Before creating communication with the DL, make sure that the cable between PC and DL has been correctly wired. For the hardware connection between PC and DL, please refer to the communication operation guide of your specific instrument

Create Connection to DL Instrument

Click **File > Connect** menu or click ![plug icon] Icon, the connect dialog will then open. The predefined connection configurations are listed in it as shown in fig1.1.
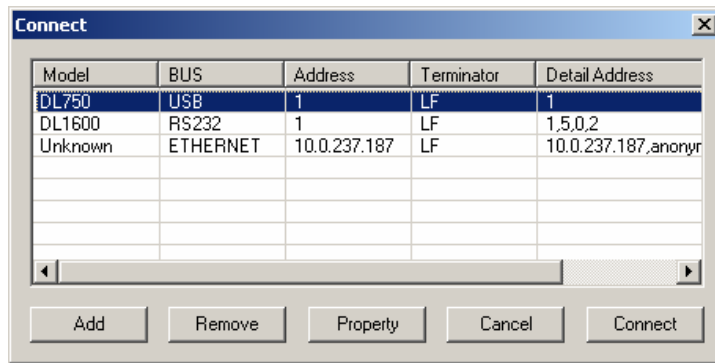

fig1.1 Connection Dialog

Add New Connection Configuration
The connection configuration list is empty at first start. To add new connection configuration to the DL, click the **Add** button. A new device configuration dialog will then open in which users can select the variable communication port and setup the corresponding parameters.

Set the interface to be used from the menu of the DL.
> For DL750 and DL1600:   **MISC > Remote Cntl**
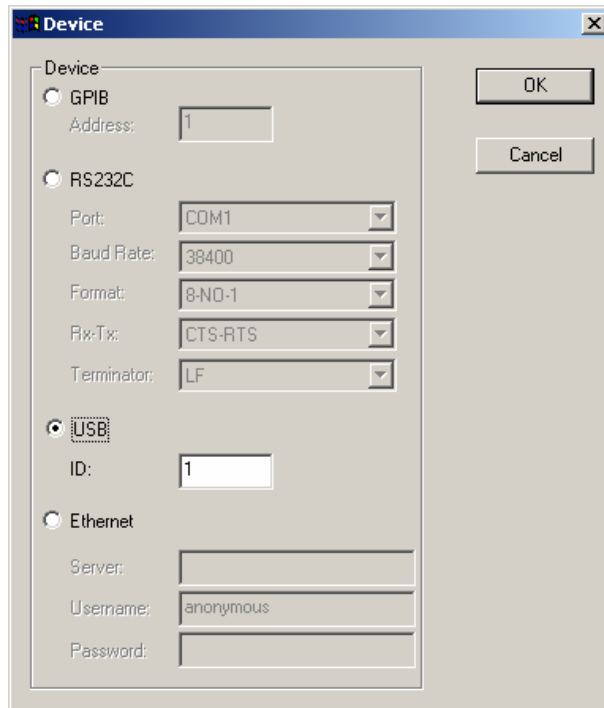> For DL7400:   **MISC > Remote Control**

fig 1.2 New Device Configuration Dialog

GPIB

Address: The unique ID of a GPIB device, ranges from 0~30

RS232

Port: COM1, COM2, COM3
Baud Rate: 1200, 2400, 4800, 9600, 19200, 38400, 57600
Format: 8-NO-1
Handshaking: CTS-RTS
Terminator: LF

USB

Address: The unique ID of a USB device, ranges from 0~127

Ethernet

IP Address: The IP address or host name of the instrument
Username: The login username for the **Remote Control** assigned by the instrument
Password: The password for the username

Click the **OK** button to add new connection configuration into the configuration list. The program will try to check the correctness of the configuration, if succeeded, it will display the instrument model name, and otherwise it will return an error message and display "unknown" as model name.

Remove Connection Configuration
Click the **Remove** button to remove a selected connection configuration from the configuration list.

Change Connection Configuration's Parameters
Click the **Property** button to change a selected connection configuration's parameters, a configuration property setting dialog will then open which looks same as the new instrument dialog. Change the connection configuration's parameters and click the **OK** button to save changes.

Create Connection to the DL Instrument
Select a defined connection configuration in the configuration list and click the **Connect** button to connect to the DL. (Double click on defined configuration in the list , also can create connection.) The program then will try to initialize the communication to the DL with selected configuration. If succeeded, The file system of the DL will be list in the tree view and list view, else, an error message will be displayed.

Break up Connection

Click **File > Disconnect** menu or click icon to break up current connection to DL device.

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Note:
       • The connection can not be broken up during its transfer session.
       • Baud Rate 38400 and 57600 are not supported for the DL750.
       • If there are many files in the DL, it takes much time to connect to the DL.

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2.Displaying File System

Displaying file system of local PC
When Start DL-Gates, it will display the file system of local PC in the tree view and list view as show in fig2.1. The files in the list view can be sorted by name, size, type and last write time.
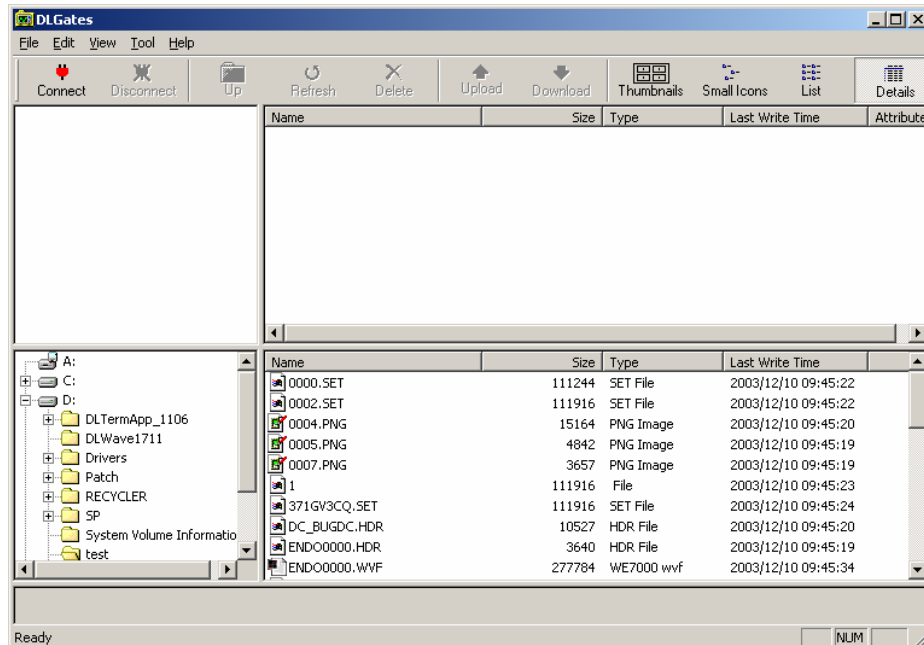

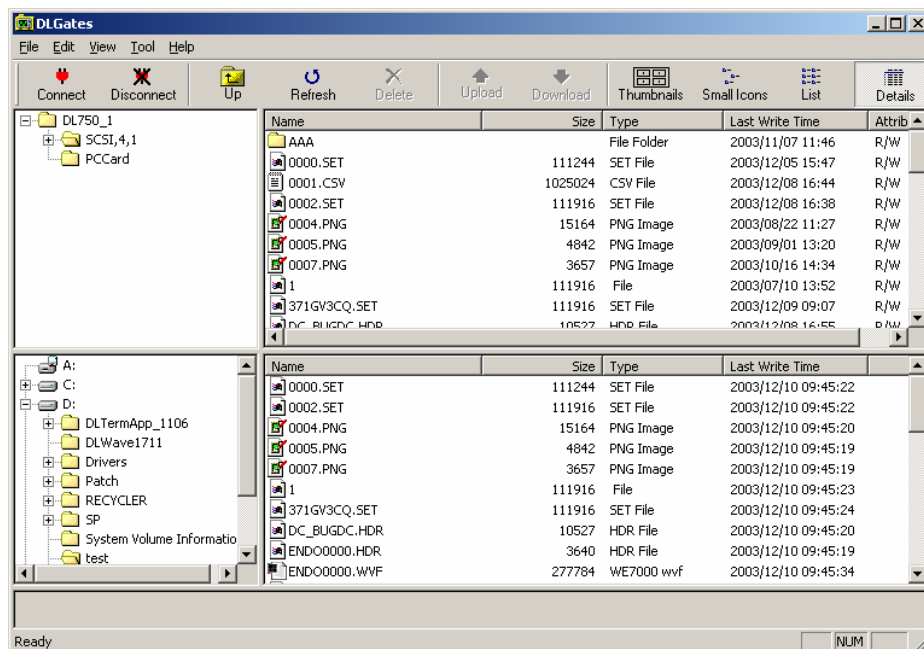fig2.1: file system of local PC

Displaying file system of DL
After connect to DL, file system of DL will be displayed in the tree view and list view as show in fig2.2. The files in the list view can be sorted by name, size, type and last write time.

fig2.2: File system of DL

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Display files of DL using thumbnails
Click the **Thumbnail** icon on the toolbar, then you can display the thumbnail of image file on the DL as show in fig2.3.
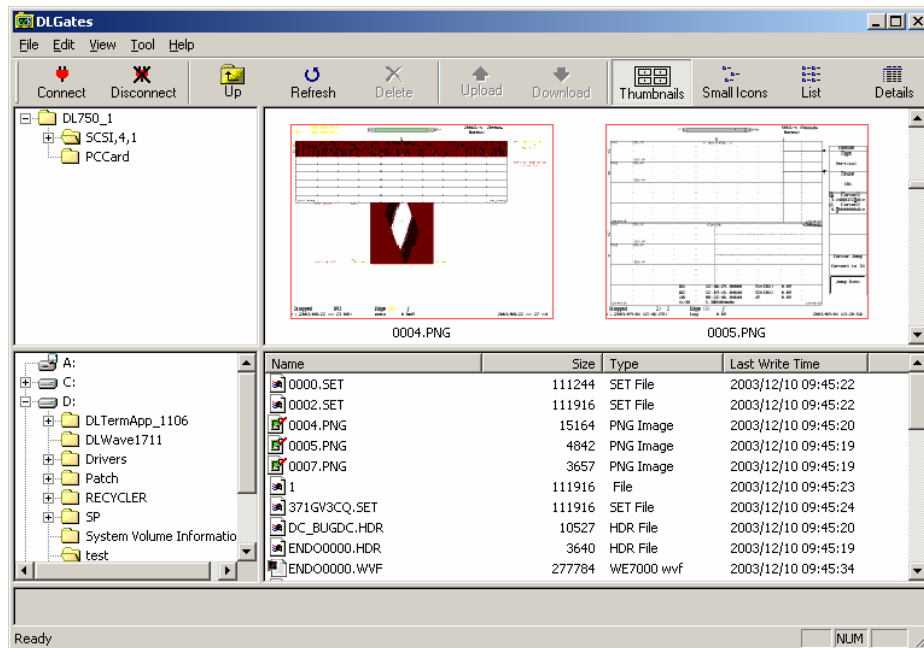
fig2.3: Default thumbnail display using 216*160 size

Modify thumbnail size
Click **Tool > option** menu, will popup a dialog as show in fig2.4. In this dialog you can modify thumbnail size.
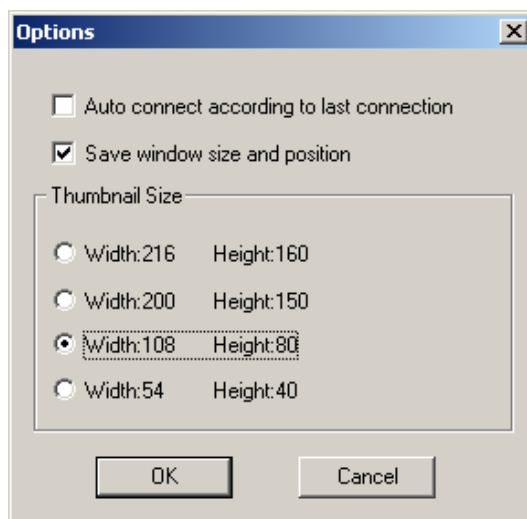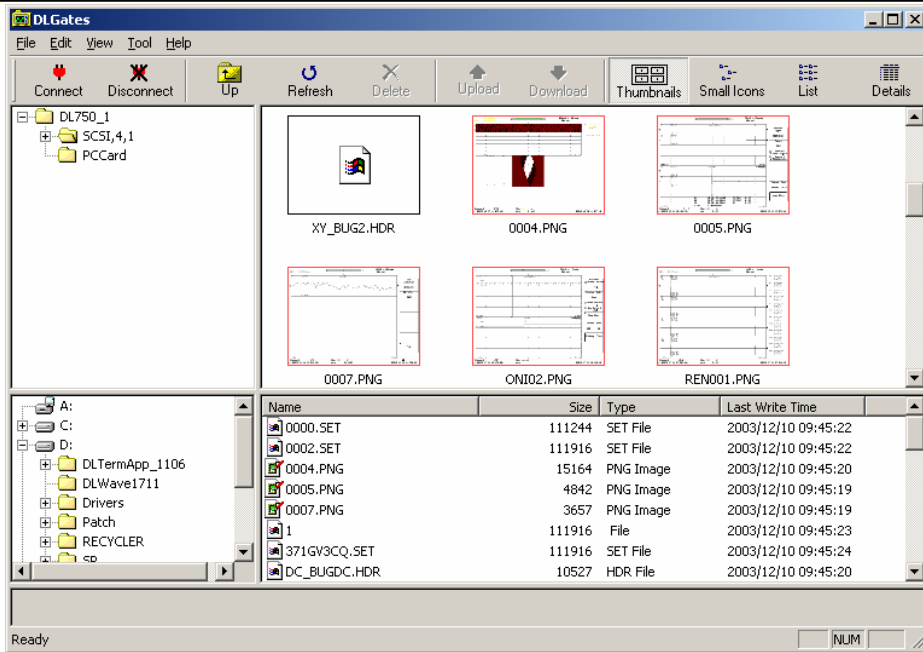

fig2.4: Option dialog

fig2.5: Thumbnail display using 108*80 size

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Note：

    • The Real time Drive in the DL750 is not supported.

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3.File Operation

Download File from DL to Local PC

Select the files from the DL List View, then click the **Download** icon on the toolbar or drag the files to the PC List View as show in fig3.1. The operation log will be displayed in the trace view.
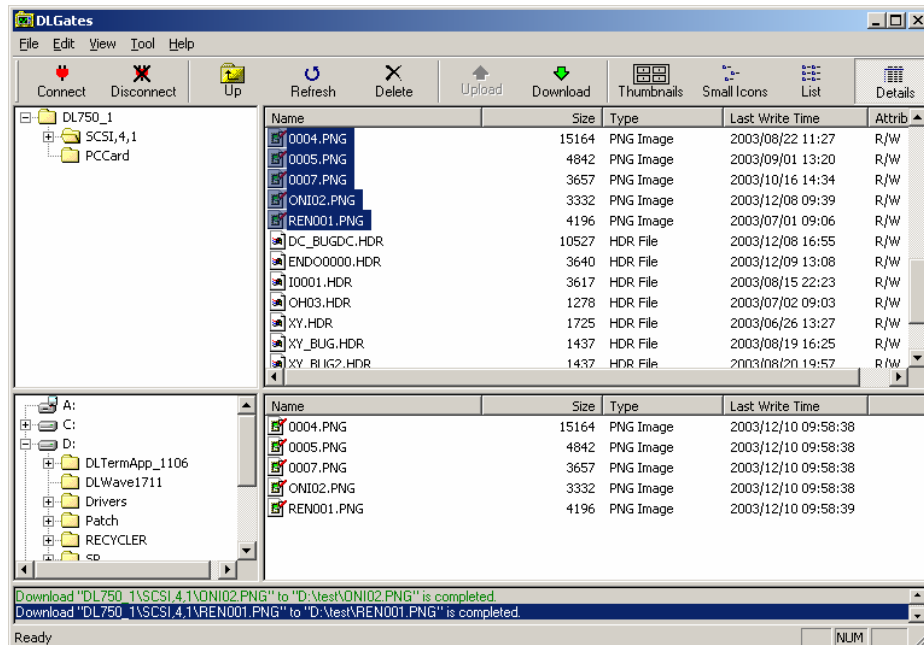

fig3.1: Download files from DL to local PC

Upload File from PC to DL

Select the files from the PC List View, then click the **Upload** icon on the toolbar or drag the files to the DL List View as show in fig3.2. The operation log will be displayed in the trace view.
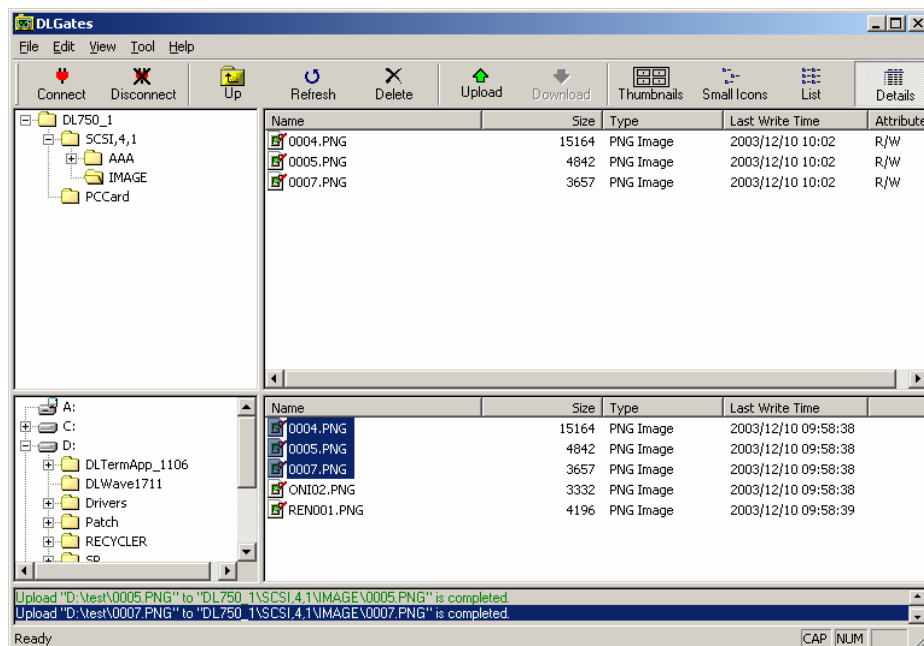

fig3.2: Upload files from DL to local PC

Delete File
Select the files from List View, then click the **Delete** icon on the toolbar or press the **Delete key** on the keyboard. The files will be deleted. As show in fig3.3.
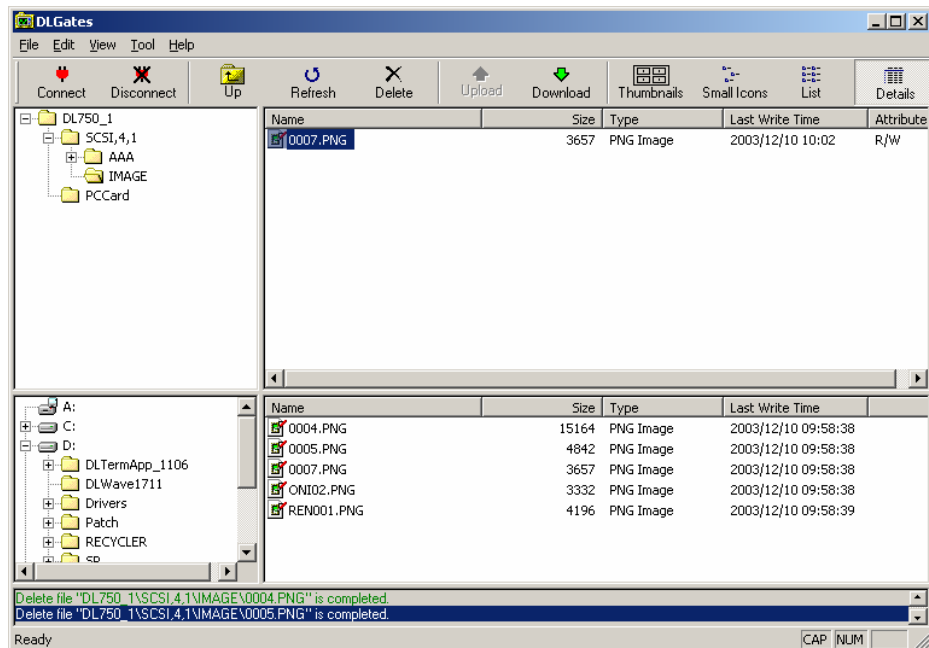

fig3.3: Delete files.

Create new folder
Click **File > New Folder** menu, then popup the New folder dialog as show in fig3.4. Input "BITMAP" in the edit box, click the **OK** button, the new folder "BITMAP" will be created.
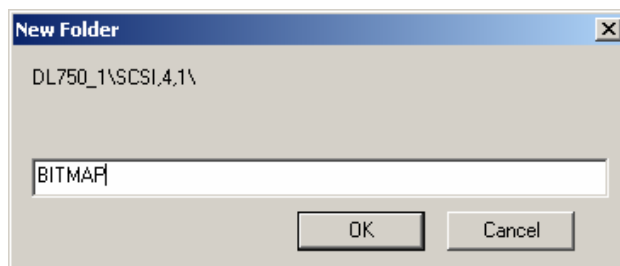

fig3.4: New folder dialog

Note:
- When use a WVF file in some software, a HDR file is necessary. In that case, please forward a WVF file and a HDR file in a pair.
- The upload function can only be used via USB.
- A name in DL is effective for only an ASCII letter (alphanumeric characters)
- If a image file is deleted , its thumbnail file will be deleted at the same time.
- Can not delete directories.

4.Other Functions

Connection to multiple DLs

DL-Gates can connect to multiple DLs at the same time, User can explore and transfer files on multiple DLs. As show in fig4.1, DL-Gates connect to DL750 via USB, at the same time, connect to DL1600 via RS232C.
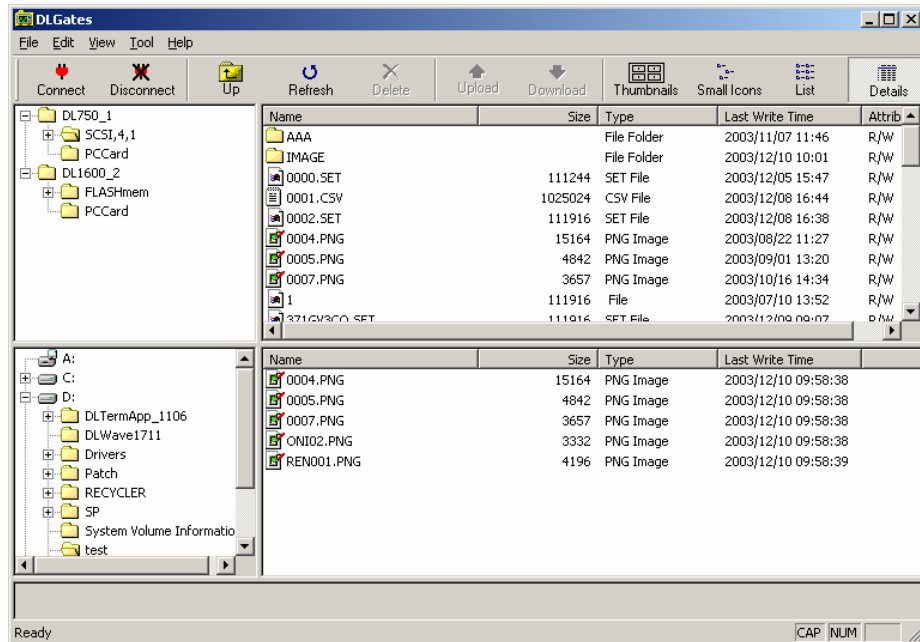

fig4.1: Connection to multiple DLs

Auto connection

Automatically connect to DL according to last connection when start application. Click **Tool > option** menu, then popup the dialog as show in fig4.2. Select the check box. When you start DL-Gates next time, it will connect to DL automatically.

Save window size and position

Save window size and position when close application. As show in fig4.2, Select the check box. When you close the DL-Gates, it will save current window size and position to the file "config.xml". When you start DL-Gates next time, DL-Gates will change its size and position as last time.
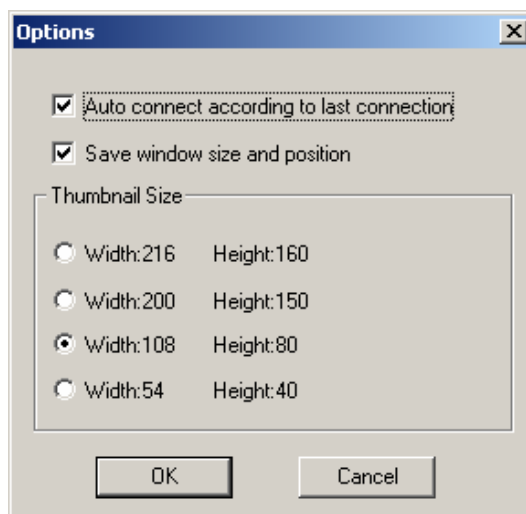

fig4.2: option dialog