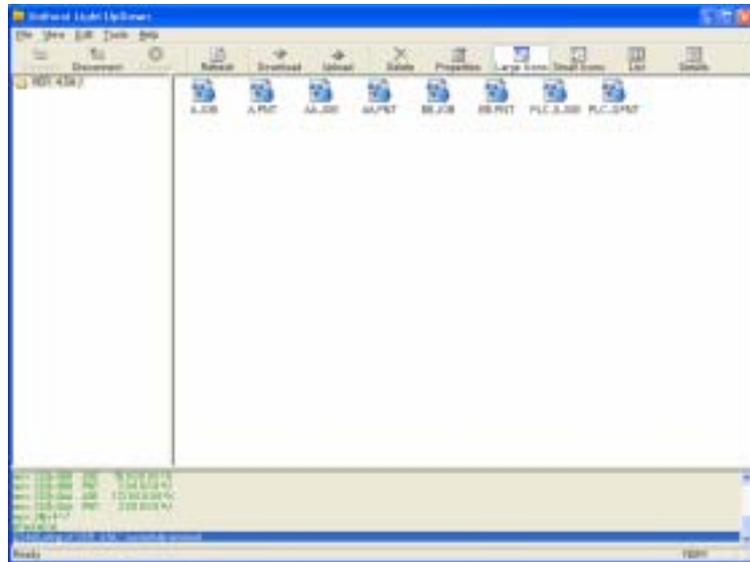


## UNIHOST LIGHT Ver1.3 Application User's Guide



**Global Leader  
In Robotics  
& Automation**

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RBUHL-GL-0509  
REV. A

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## 1. Installation

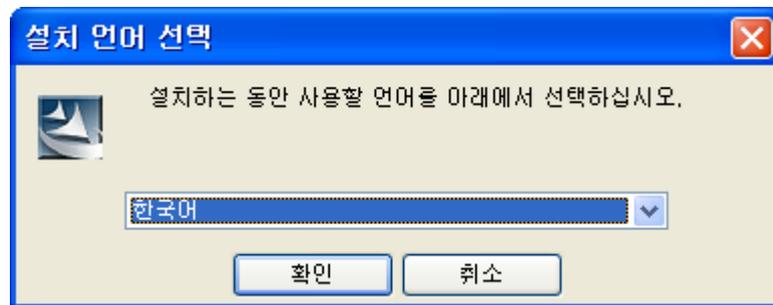
### 1.1 Overview

Unihost Light Ver1.3 Application program provides functions such as transmission of files between robot controller and computer, parameter setup.

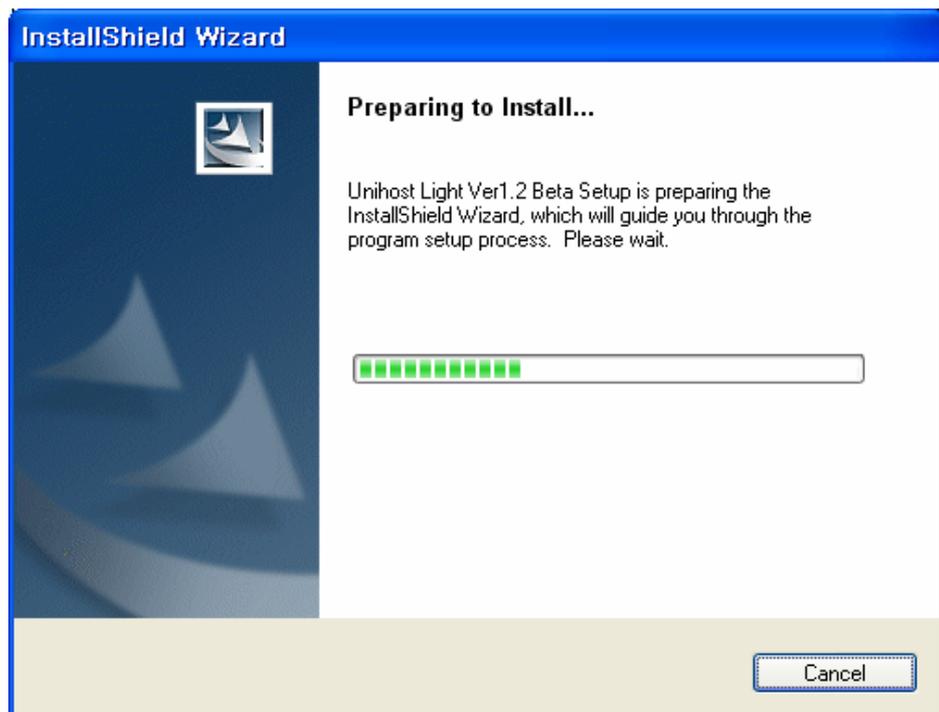
### 1.2 Unihost Light Ver1.3 Application Installation

#### 1.2.1 Installation Procedure

Execute "SETUP.EXE" and it asks selecting language as below. There are three languages available to select, Korean, English, Italian.



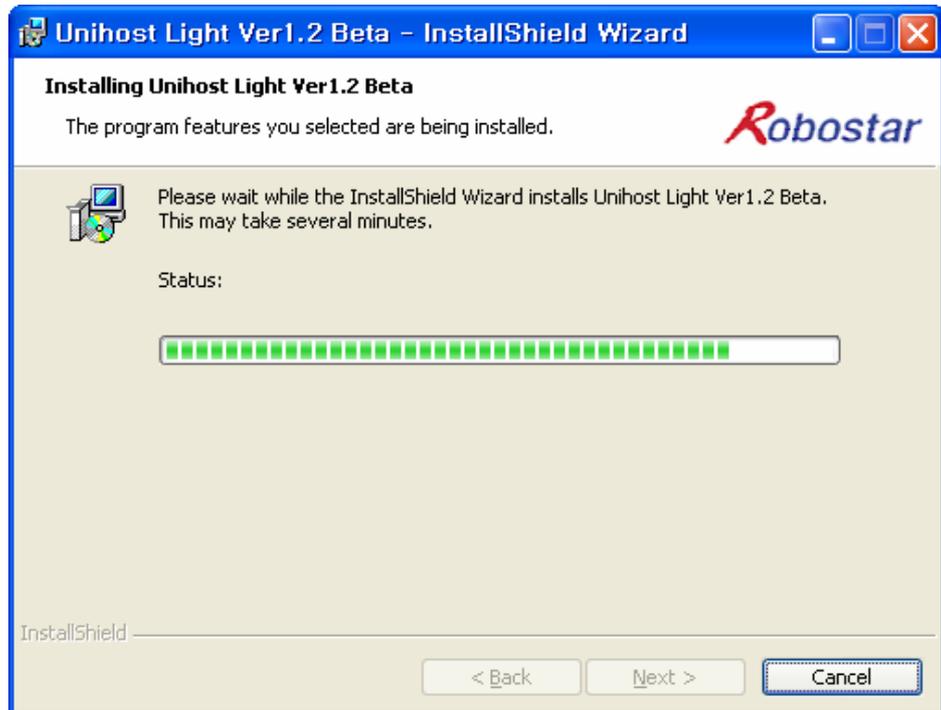
Select the desired language and click "confirm". The window for Install shield Wizard will show up as below.



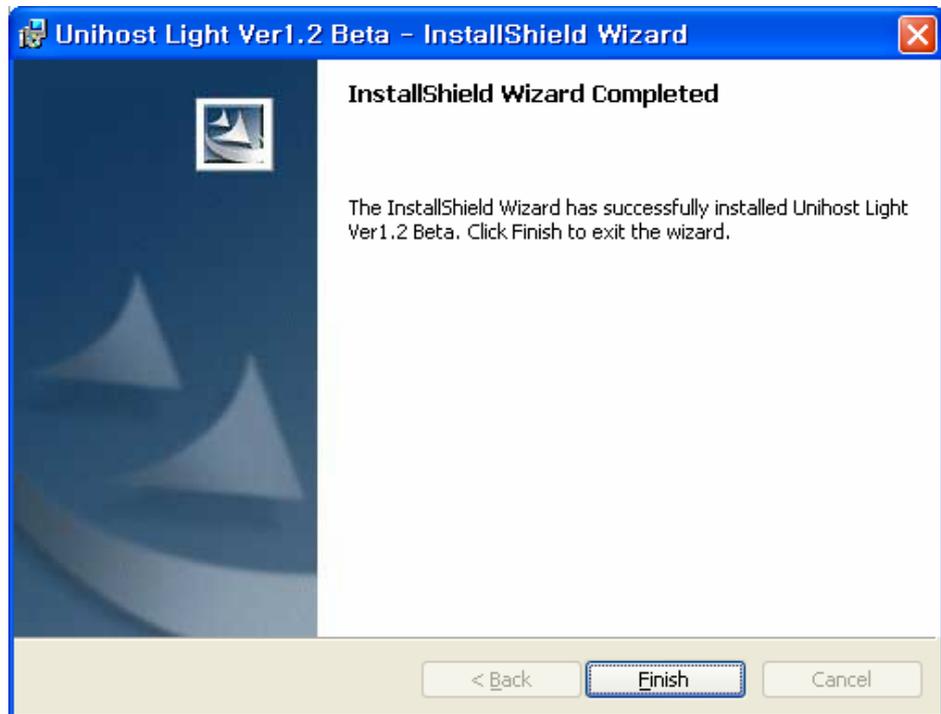
When ready to install, the window as below will show up



When clicking "Install" button, the configuration elements of Unihost Light Ver1.3 Application are installed

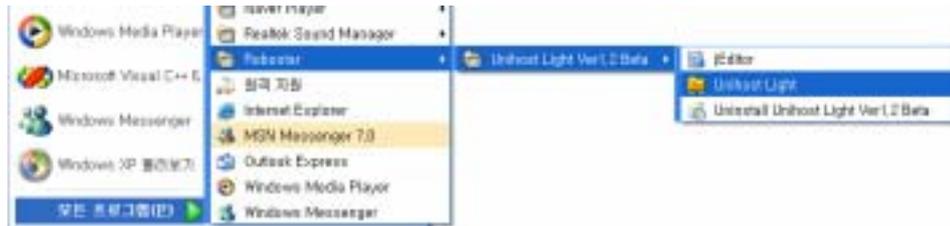


If the installation is completed correctly, the message as below will show up.



### 1.2.2 Confirmation of installation

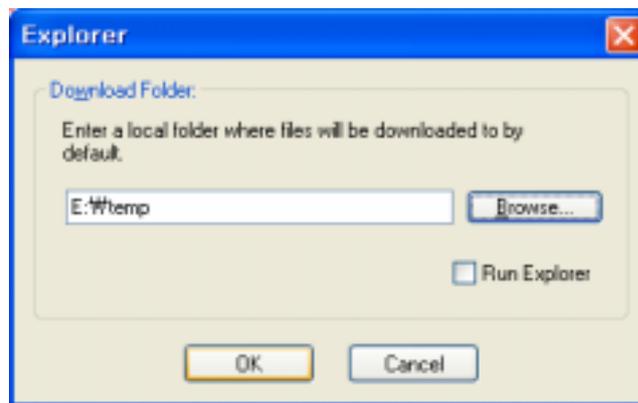
If the installation has been completed by executing the process as 1.2.1, it is possible to confirm as below.



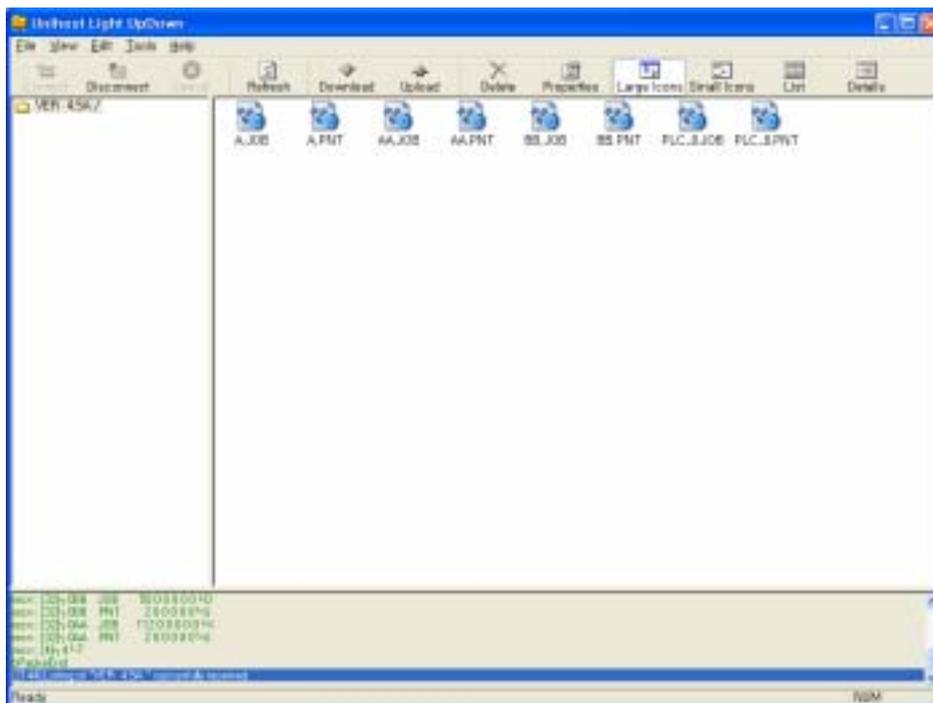
## 2. Operation

### Program outline

Unihost Light Ver1.3 Application is the program, using serial communication (RS-232C), to up/Read files and set parameter through transmission of protocol agreed between computer and robot controller. The figure in below is the Main Windows when executing Unihost Light Ver1.3 Application. Select a directory to save files of controller before opening Main Window. If wanting to use explorer, check Run Explorer.



The left side of main window shows the version of controller. It shows version information (it shows only the RCi Series EPROM 4.5A and above. In case of prior to EPROM 4.4, it shows only “”).

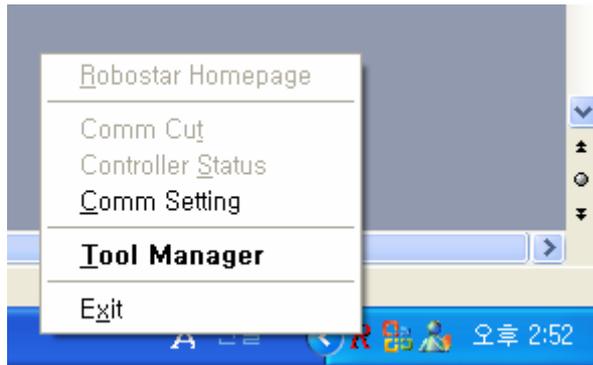


Unihost Light Ver1.3 Application consists of two programs, Unihost Light and Unihost Manager. Unihost Light is the display window that user can send commands to robot controller and Unihost Manager is the program executing communication. The basic procedure is that User orders a command to send in Unihost Light and then Unihost Manager transmit the command to robot controller. Unihost Manager program starts automatically when Unihost Light program send command and it is displayed as tray (see below figure). And when closing Unihost Light Ver1.3, uManager program is closed at the same time.

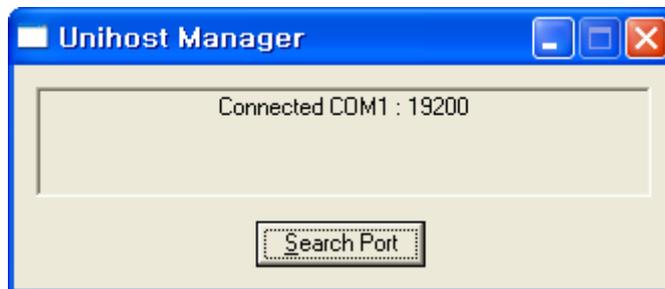


Unihost Manager display shown as Tray on Tool bar of Windows ( R )

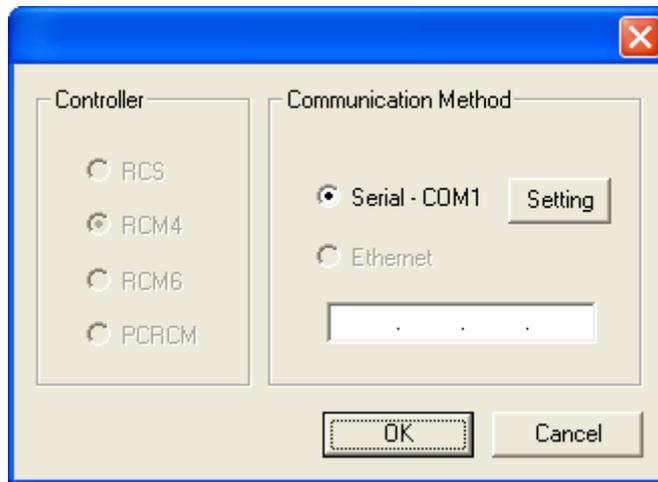
Unihost Manager consists of menus as below



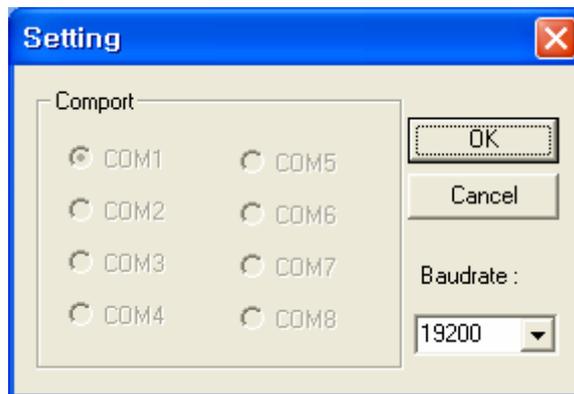
Tool Manager displays the status of Serial Com port interface. The following figure shows the example of case that the interface is connected through COM1.



In Comm Setting menu, the type of controller and Serial Com Port can be set.



Serial state is displayed in Communication Method. If Serial Com port is not detected automatically, it is possible to set manually. The below figure shows the case which COM1 is set automatically. And Baud Rate can be set as 4800, 9600, 19200.



*\* Note :If Baud rate is different from Baud rate of Controller, communication can be failed.*

## 2.1 Unihost Light Ver1.3 Wizard

Unihost Light Ver1.3 has a powerful function that JOB program, Point data, Parameter/Pallet can be Write or Read at once.

### Read Wizard



Step1) Create directory to save. Read Folder is initialized as directory saved at first.

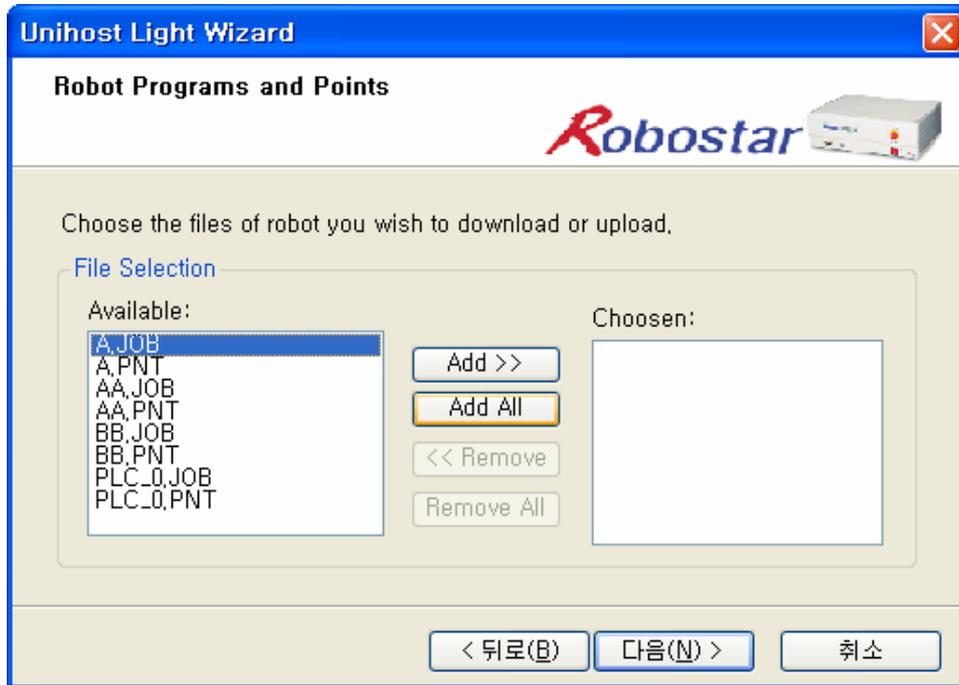




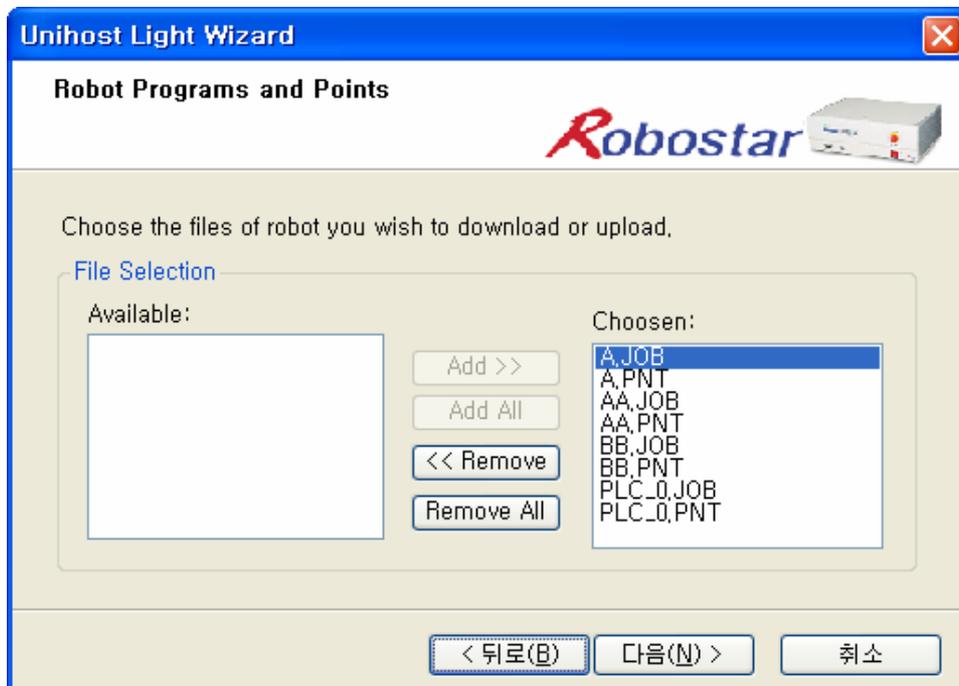
If writing RCM4 in Read Edit Box, when pressing “NEXT” button, it asks if creating directory. In case of directory exists, the below window is not displayed.



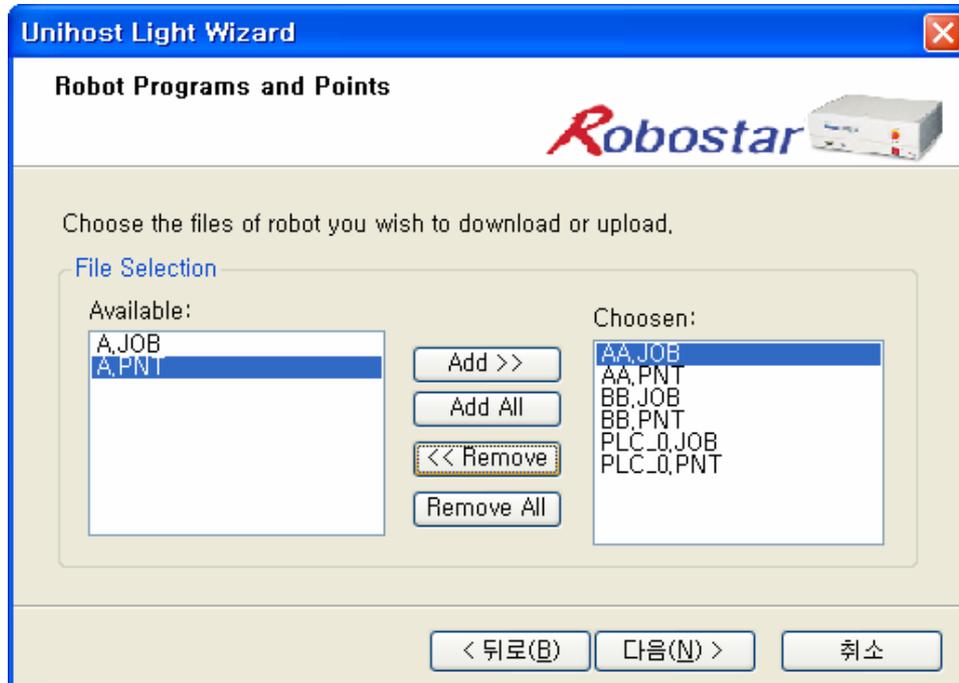
Step2) Call all JOB/PNT files in controller. It is possible to choose a desired file to Read.



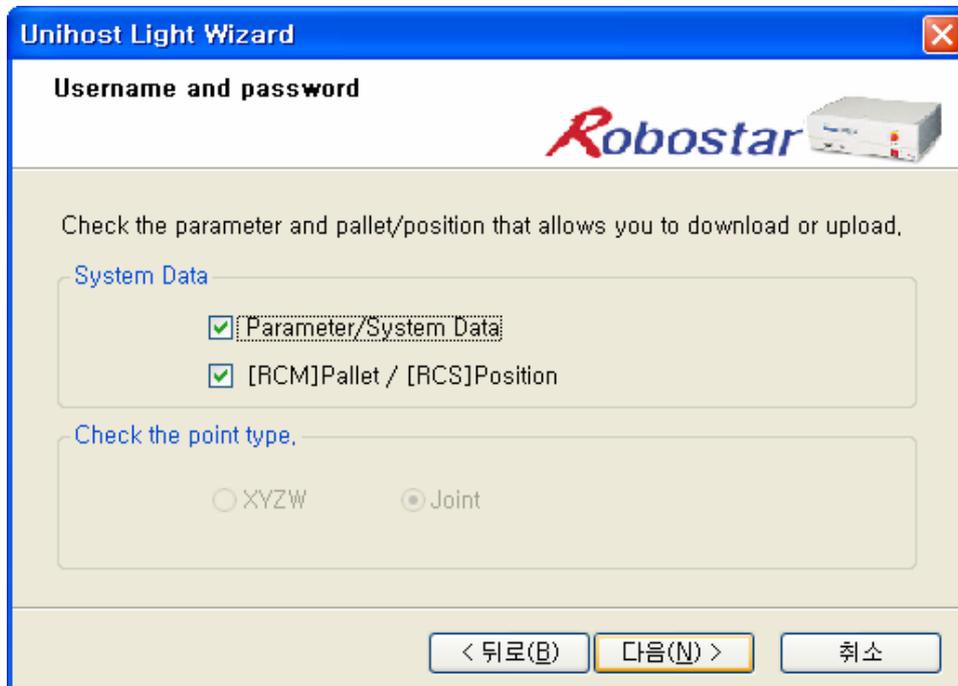
The figure below shows the case of choosing all files by pressing “Add All” button.



The figure below shows the case to extract some files by pressing "Remove" button.

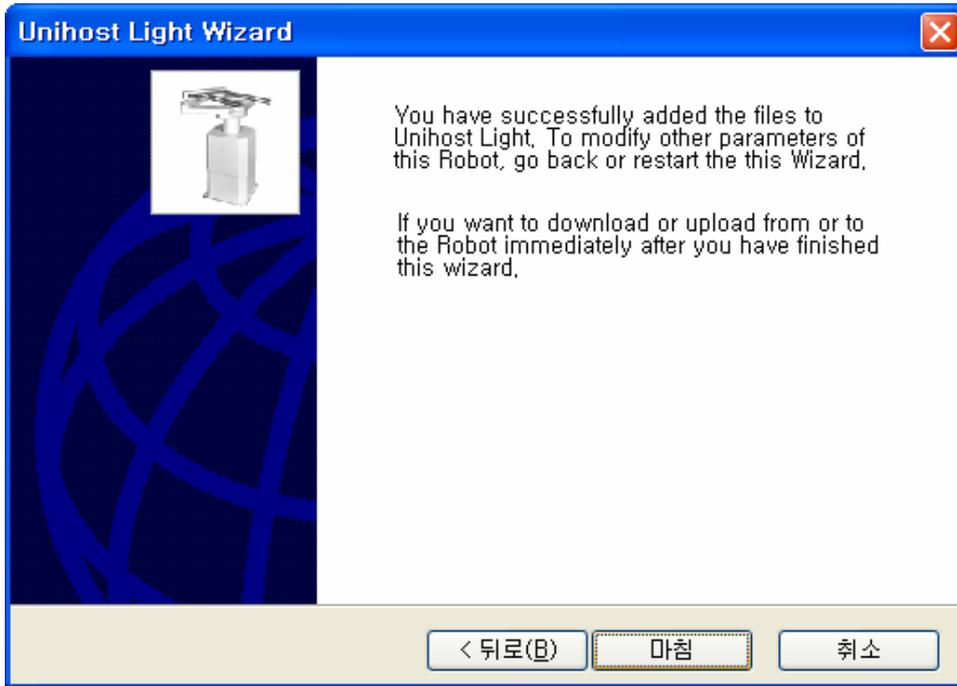


Step3) Check whether receiving parameter or pallet data. When Reading, it is saved as parameter file (00.sys) and pallet file (00.pt).And when Reading, point data is transferred as Joint.

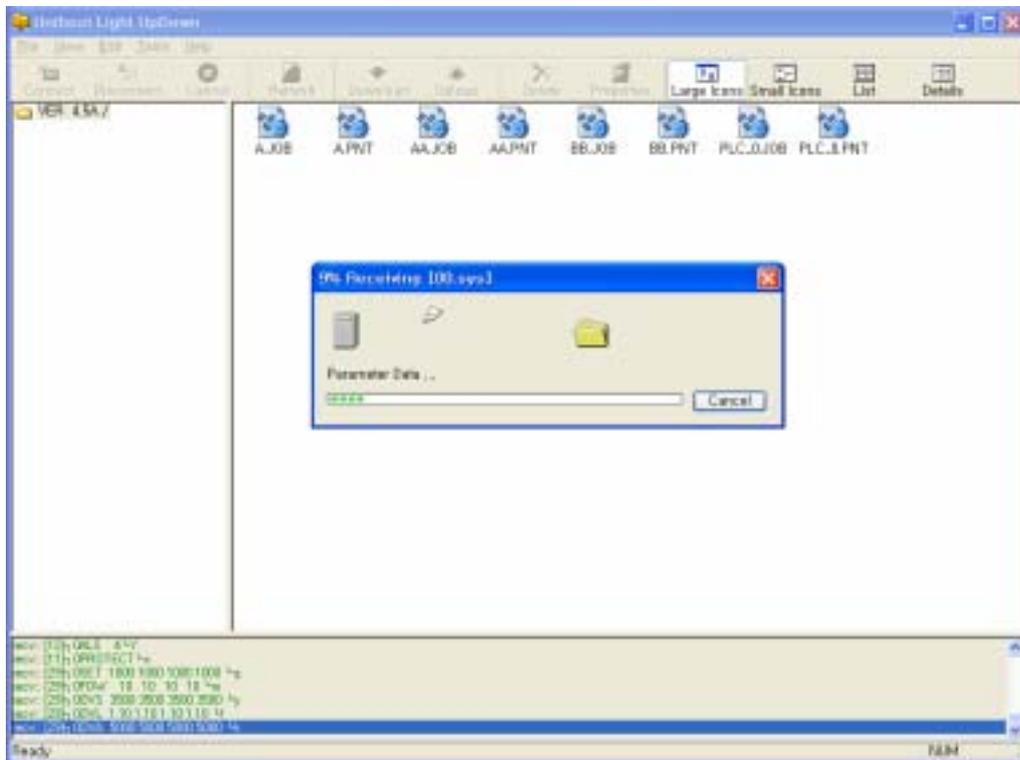


\* Note : This function is adopted only EPROM Ver 4.5A and above. Prior to 4.5A is not adopted.

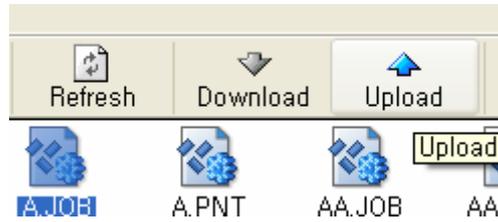
Step4) Complete all Read Wizard steps.



When pressing “Complete” button, it receives selected files and data.



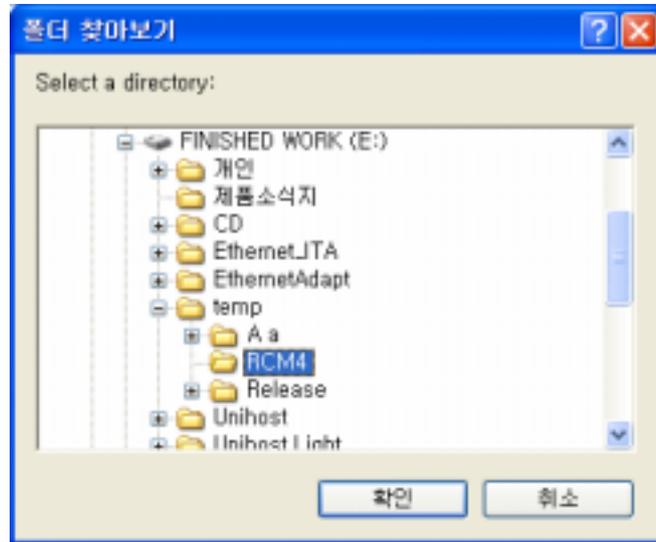
## Write Wizard



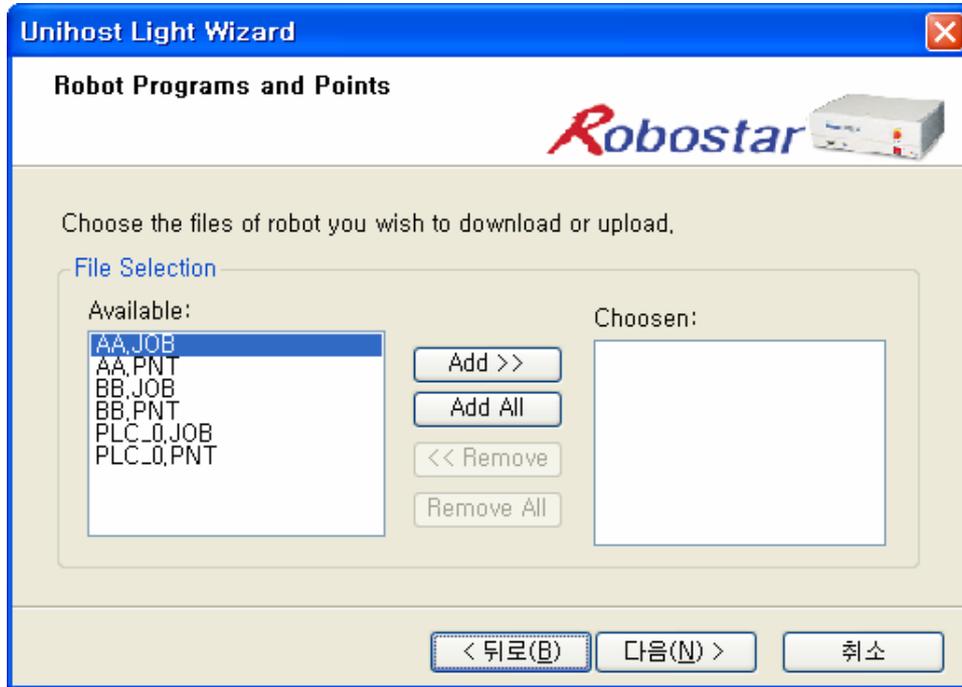
Step1) Set directory to Write from Write Folder.



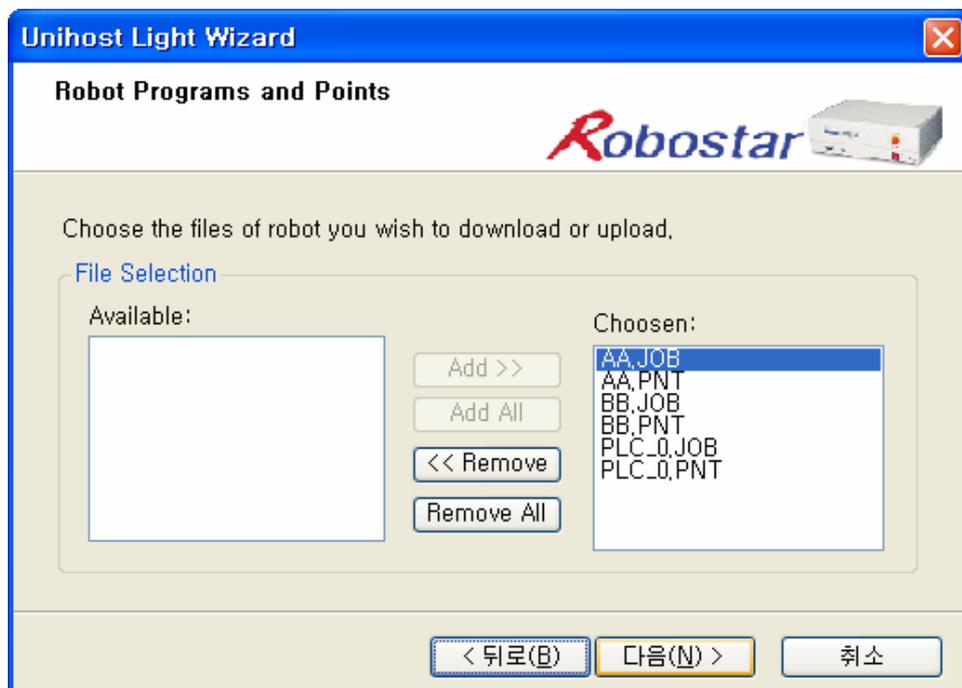
By pressing Browser button, set directory received from Read Wizard.



Step2) Call all JOB/PNT files in RCM4 directory.



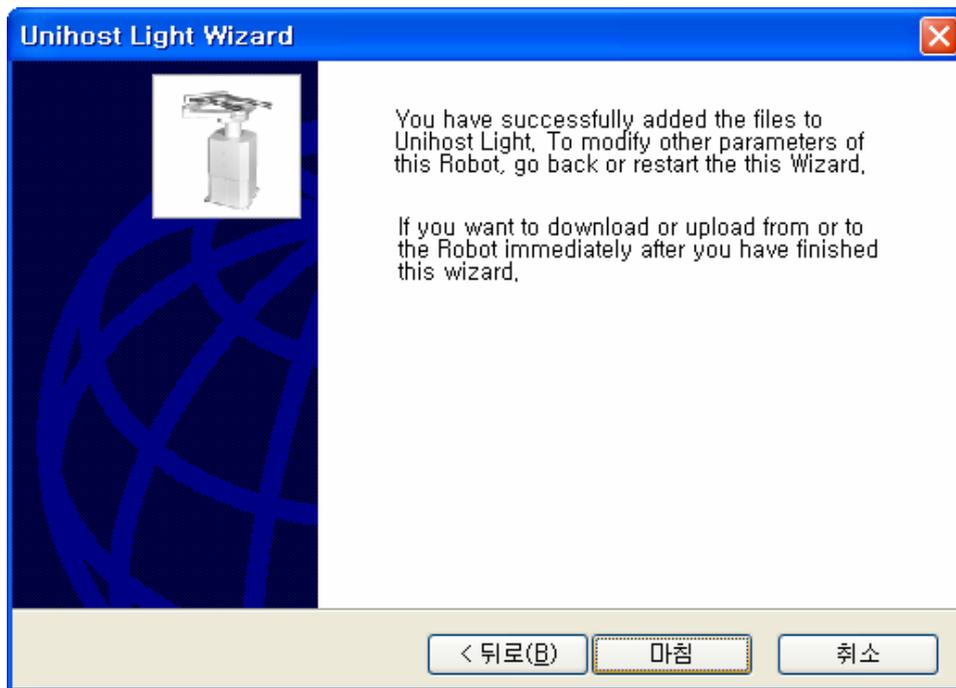
The figure below shows the case of choosing all files by pressing "Add All" button.



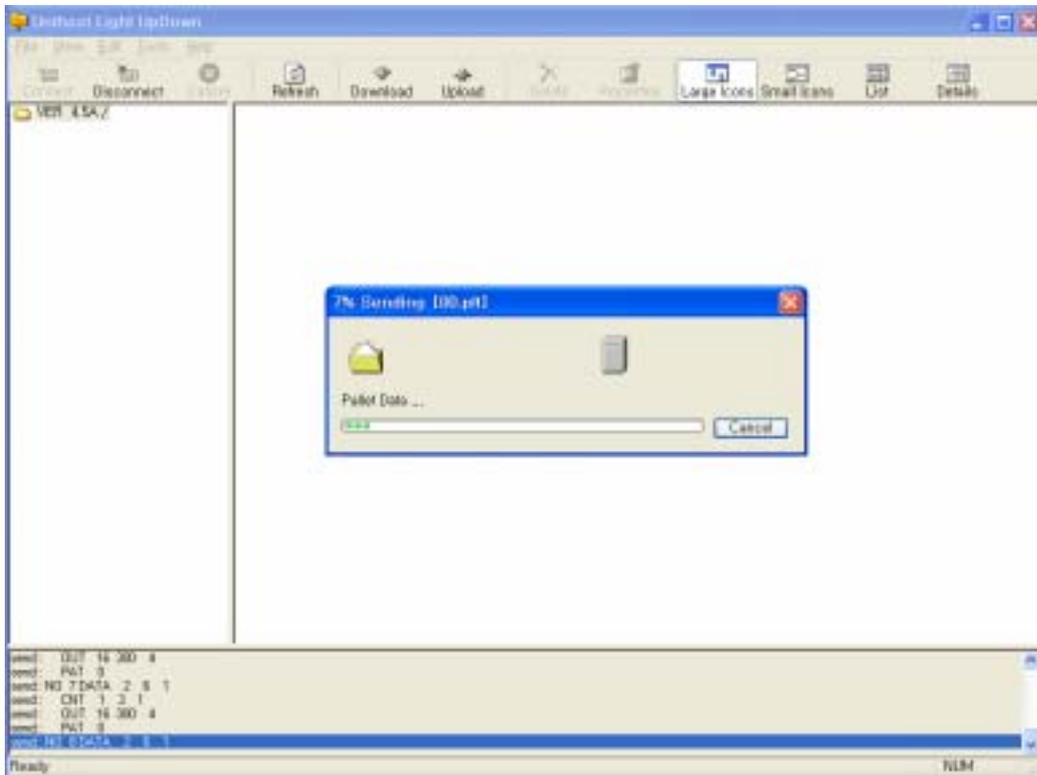
Step3) If parameter file (00.sys) or pallet file (00.plt) exist in "RCM4" directory, it is displayed with check mark. If it is not necessary to Write, release the check mark.

*Note) This function is only adopted for RCi Series EPROM Ver 4.5A, the prior to EPROM Ver 4.4 is not available to Write (it is because of system stability)*

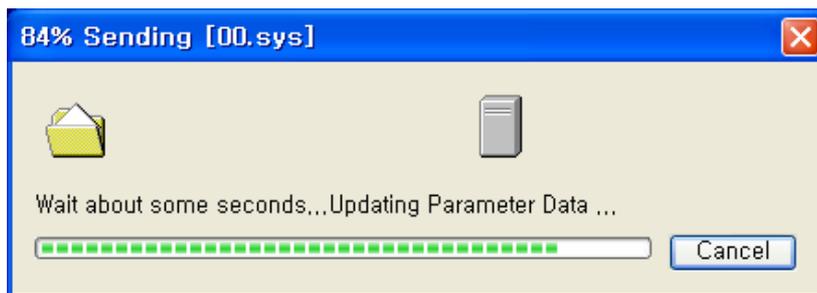
Step4) Complete all Write Wizard steps.



When pressing "complete" button, the selected files and data are transferred to controller.

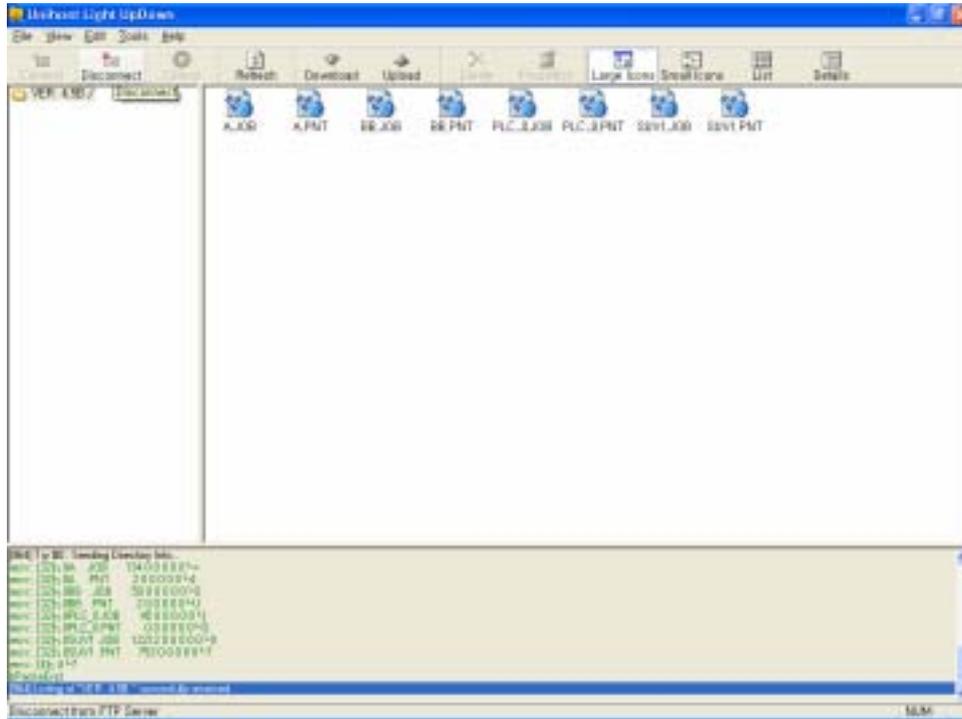


In case of choosing Parameter, it Write by loading 00.sys file. It takes about 35 seconds to adopt in controller after Writing all data. The figure below shows the processing window.



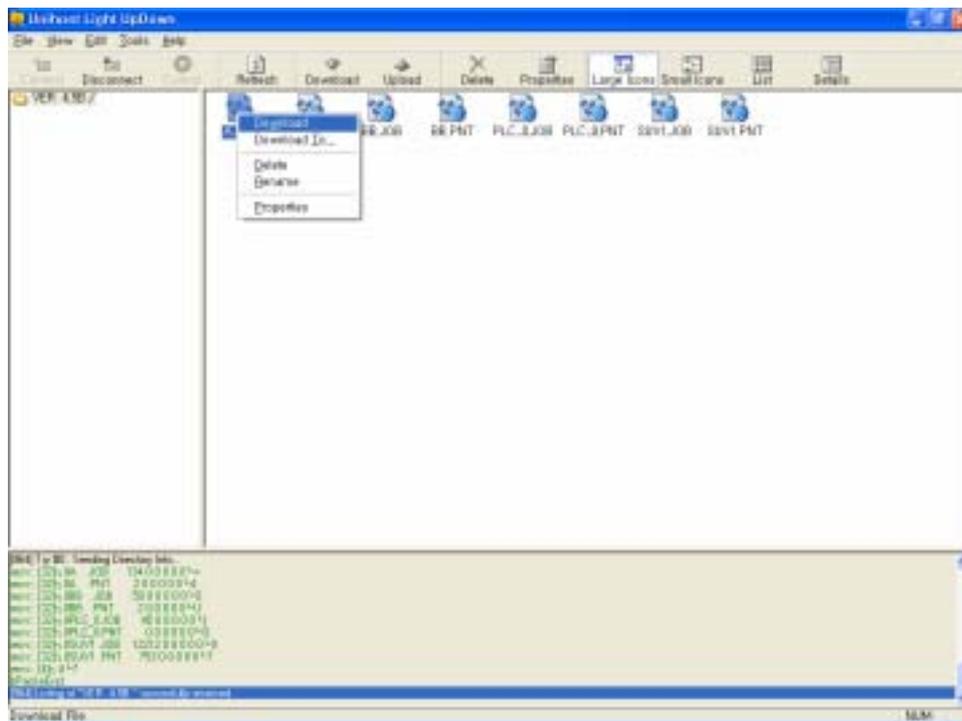




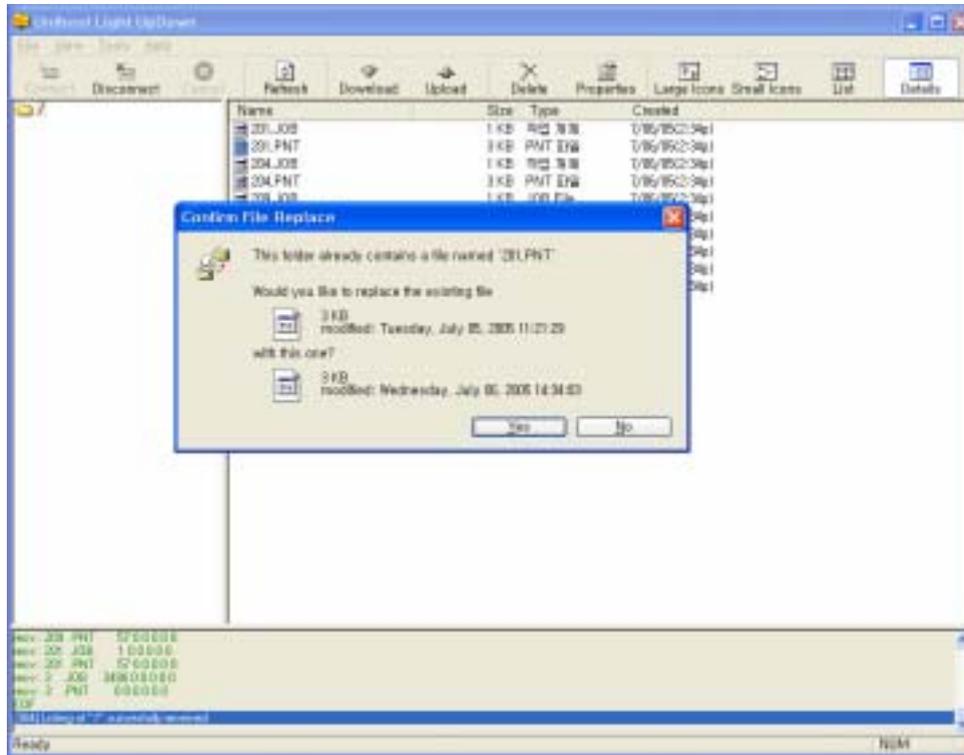


### 2.2.3 Read

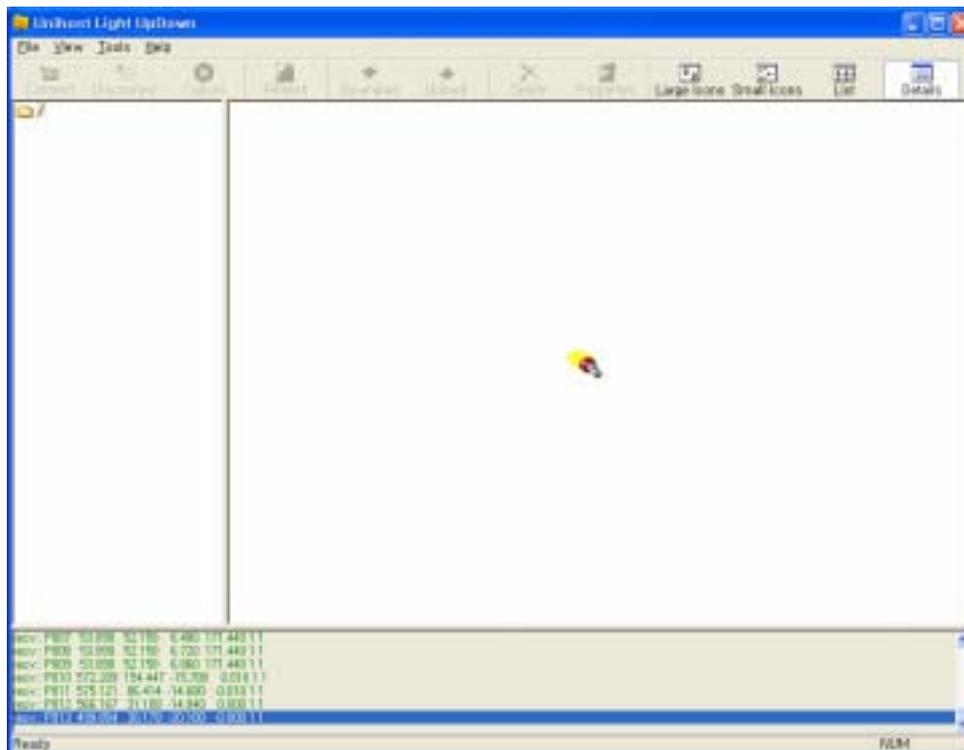
As figure below, when selecting Read in File Menu, it saves selected file among files in Robot Controller to PC.



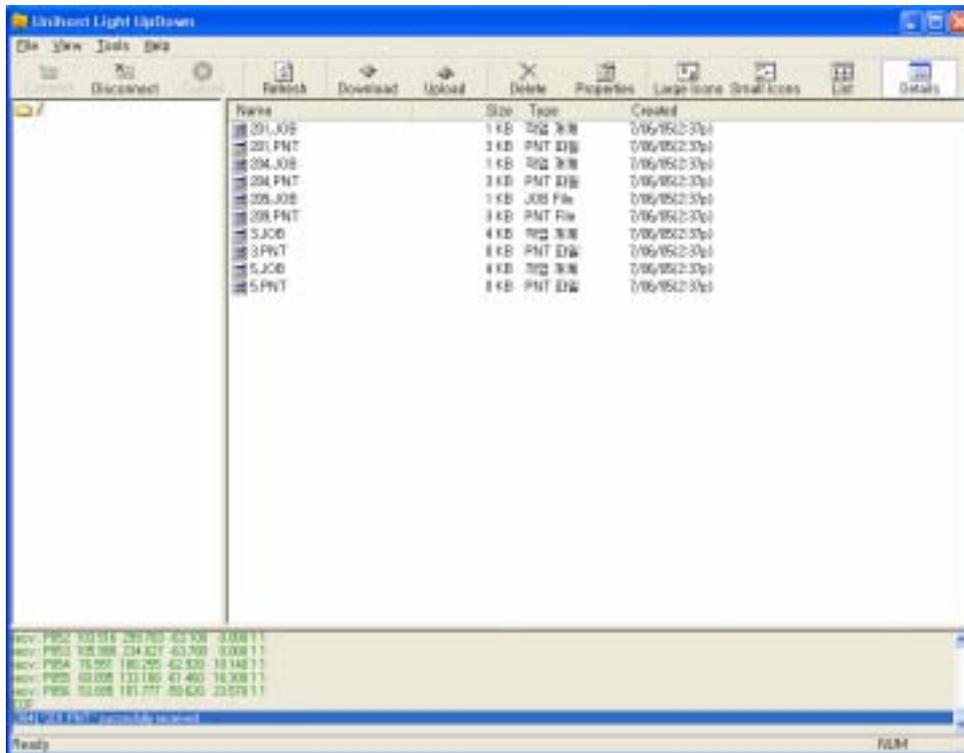
When clicking Read in File Menu, if there is same name of file, the window asks if replacing the file with the previous one. If selecting "No", it stop Reading.



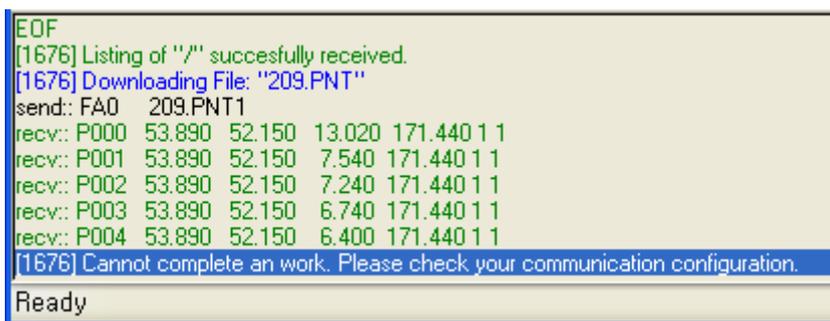
The window as below is shown up as file transmitting starts.



The message of completion is shown up in Trace window as completing Read.



Read failure happens usually when communication is disconnected and proper data is not possible to be transmitted between PC and Robot Controller. As it is disconnected, error message "please check your communication configuration" is displayed. In this case, the connection is stopped automatically and user must connect it again after checking the communication condition.



In other case, the communication condition of Robot Controller has been changed, so it can be caused by that the data of transmitted command from PC is broken or it is not sent correctly. At this time, "protocol error" is displayed. To solve this problem, check the data sent from PC to Robot Controller if it is correct and the communication condition, then execute Read again.

```

EOF
[1676] Listing of "/" successfully received.
[1676] Downloading File: "209.PNT"
send: FA0 209.PNT1
rcv: P000 53.890 52.150 13.020 171.440 1 1
rcv: P001 53.890 52.150 7.540 171.440 1 1
rcv: P002 53.890 52.150 7.240 171.440 1 1
rcv: P003 53.890 52.150 6.740 171.440 1 1
rcv: P004 53.890 52.150 6.400 171.440 1 1
[1676] Protocol Error.
Ready
    
```

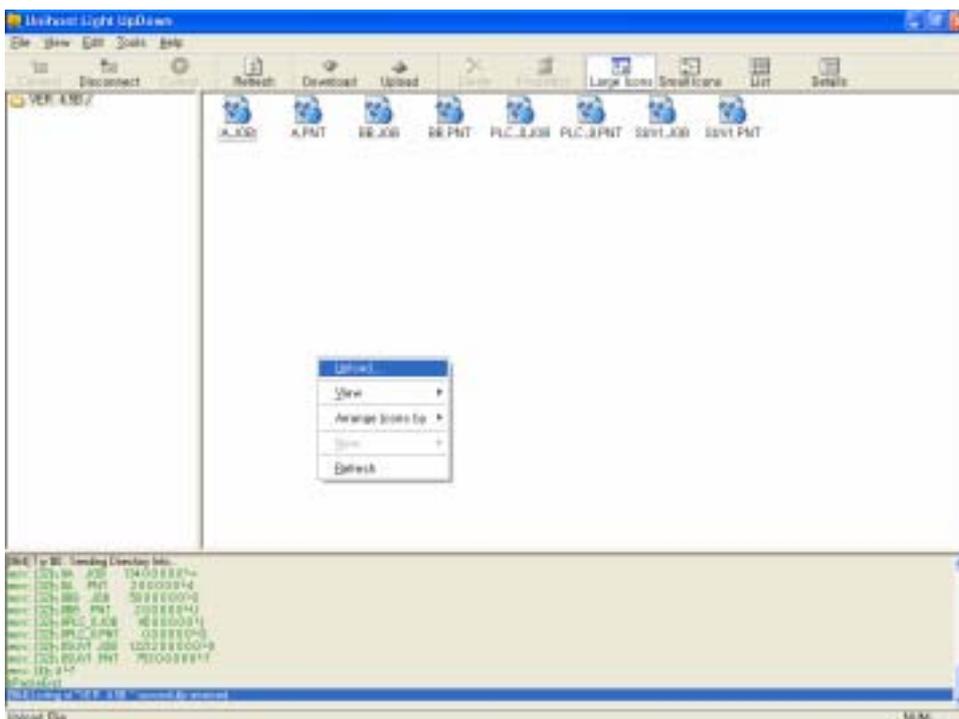
Under the state that the Robot Controller is not in on-line mode, when requesting Read, "Function Execution FAIL" error is happened and the description of failure is displayed. To solve the problem, change the condition to communication mode.

```

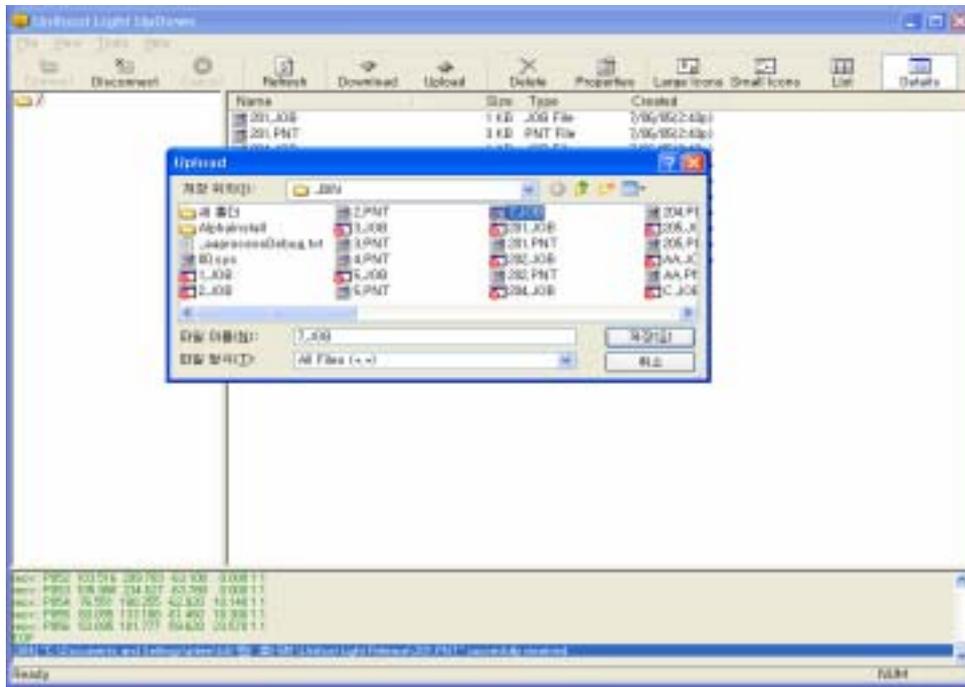
[3096] Listing of "/" successfully received.
[3096] Downloading File: "C:\Documents and Settings\jmlee\바탕 화면\201.PNT"
send: FA0 201.PNT1
[3096] Function Execution FAIL.
send: ACK 3
Reason of function error : Requested command is not serviced under current state
send: ACK 0
Ready
    
```

### 2.2.4 Write

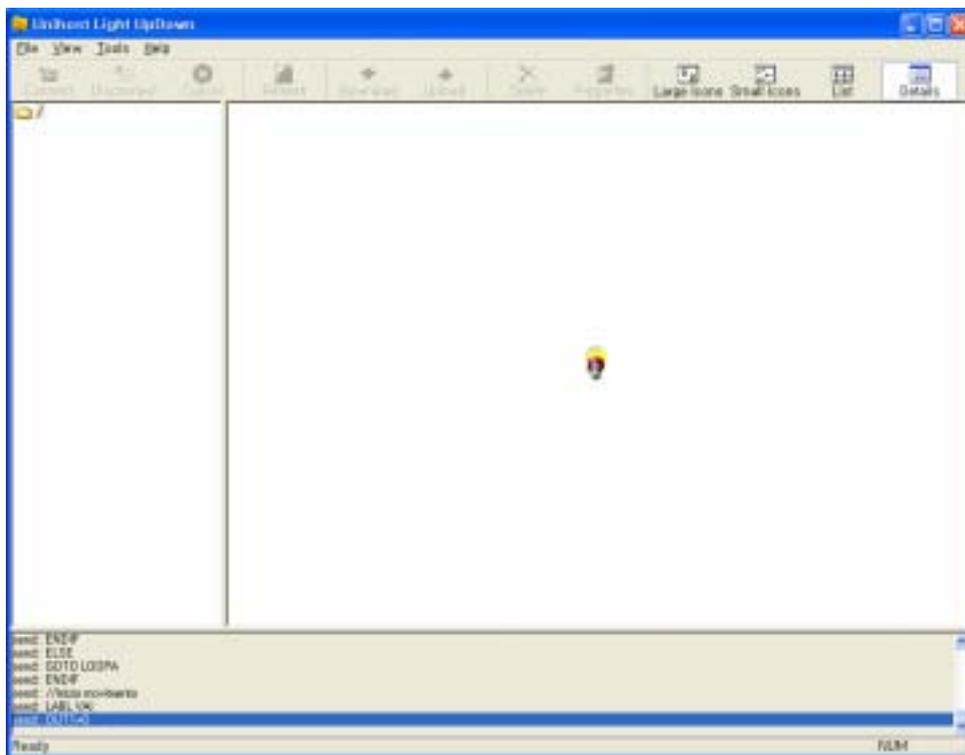
In opposite function of Read, it transmits the selected file in PC to Robot Controller. Only JOB file and PNT file are available to transmit.



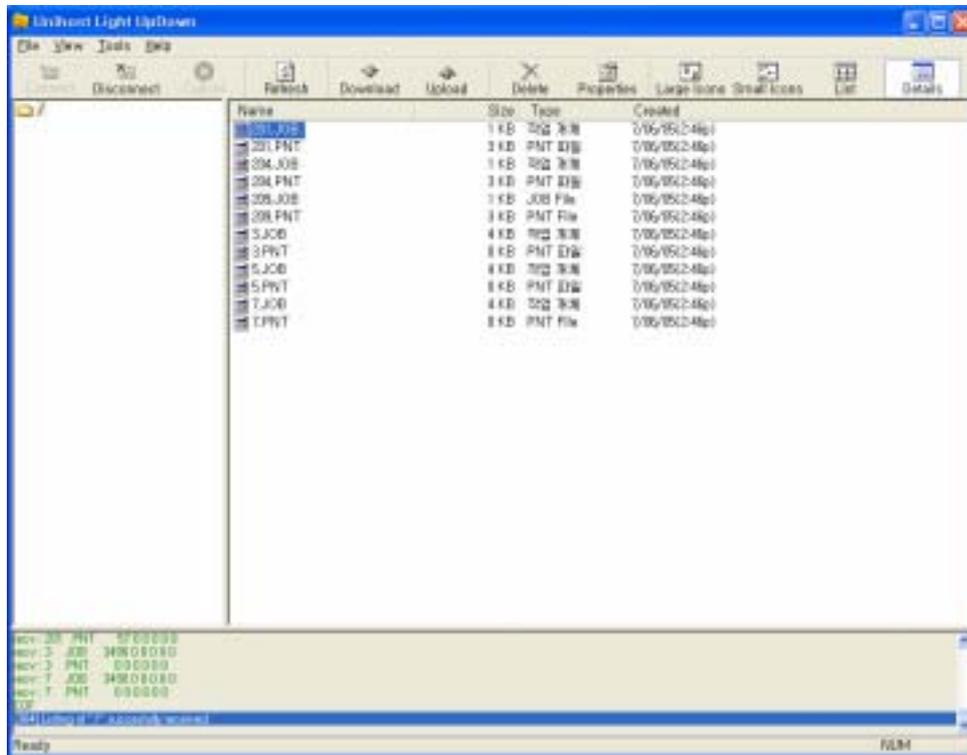
When selecting Write in File menu, window to select file to Write is displayed as below. Select file and click the save button, the Write will be executed.



While Write is in progress, it is not possible to execute other work (the window as below is displayed).



When Write is completed, the message is displayed as below.



The Write failure occurs, same as Read failure, when the communication is disconnected and the data is not transmitted correctly between PC and Robot Controller. The measure is also same as the case of Read.

The following is display of the case of disconnection.

```

send: INT AA,TMAPE,MAROCC
send: INT TMOLD,INCRE,K,I
send: INT TEMPO
send: POS TMP
send: VEL 100
send: K=1
send: OUT2=0
send: DLAY 100
send: TMOLD=0
[1320] Cannot receive an return packet. Please check your communication configuration.
Ready

```

This is the case of error that PC sends incorrect data to Robot Controller or the data is not received properly by Robot Controller.

```

send:: DLAY 5
send:: OUT0=1
send:: VDAT 0
send:: OUT0=0
send:: LABL LOOPA
send:: IF IN2==1 THEN
send:: IF IN4==1 THEN
send:: GOTO VAI
send:: ELSE
[1320] Protocol Error.
Ready
    
```

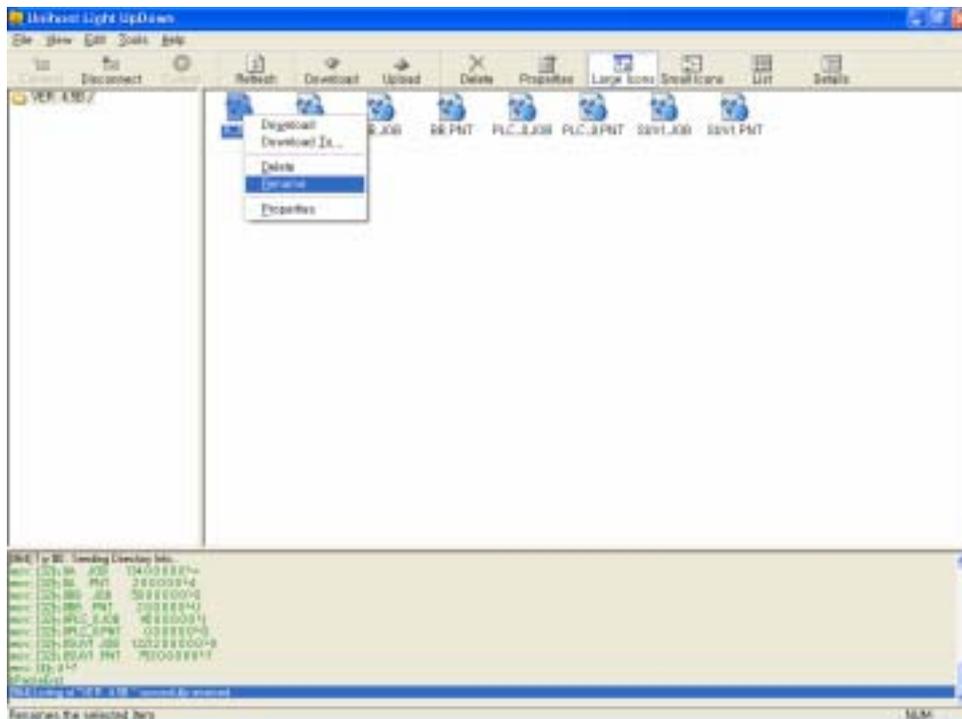
It is the error occurred when Robot Controller is not in on-line mode.

```

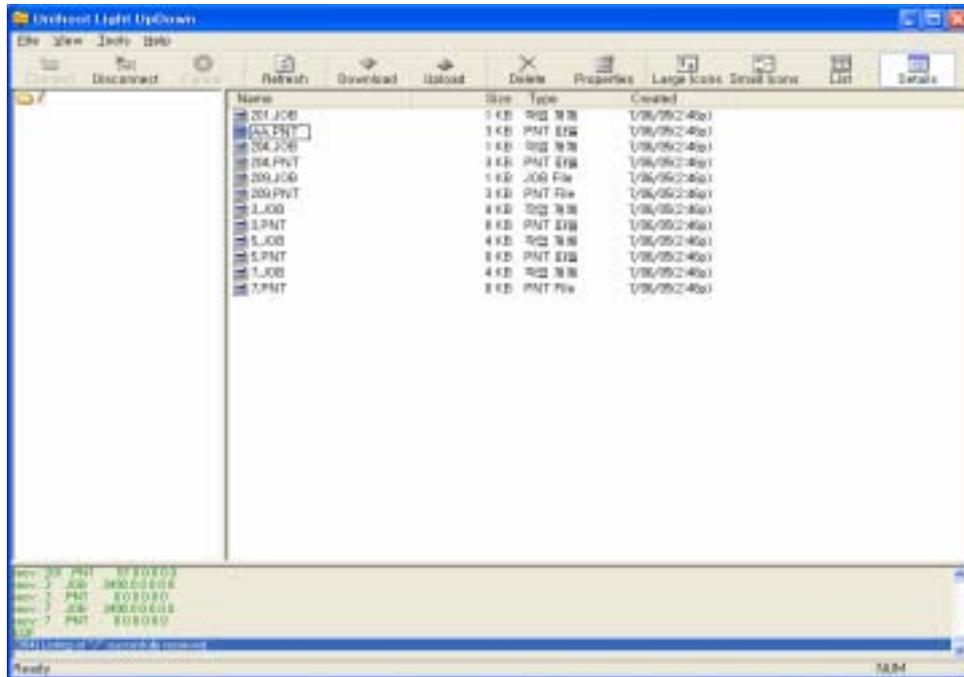
send:: ACK 0
[3096] Uploading: "D:\01_project\unihost_project\개 박 중 \xxx\_BIN\5.JOB"
send:: FBO 5.JOB
[3096] Function Execution FAIL.
send:: ACK 3
Reason of function error : Requested command is not serviced under current state
send:: ACK 0
Ready
    
```

### 2.2.5 Rename

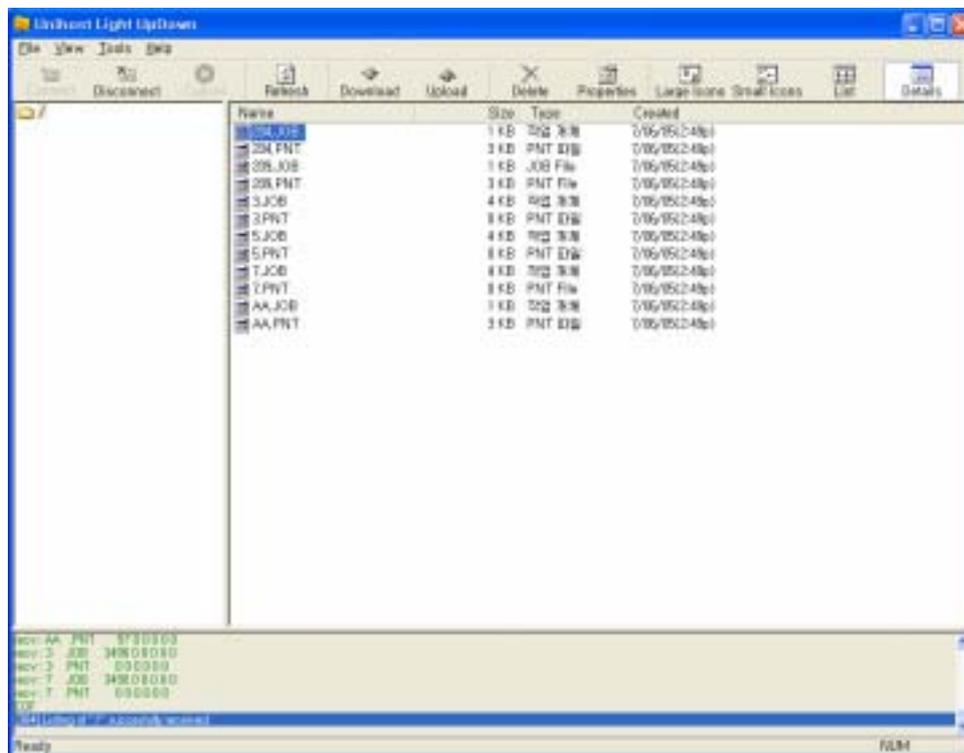
It is possible to change the file name in Robot Controller by choosing Rename of File.



It changes the file name selected. The below example shows the case that 201.PNT file is changed to AA.PNT file.



When completing rename, search file information of Robot Controller.



Caution: The file name allows Alphabet and figure only. And it also allows up to 5 characters except file extension. Followings are several examples of error

Case 1) File name is more than 6 characters.

Error message: "length of file name is too long"

```
[3096] Uploading: "D:\01.project\unihost_project\개 발 중 \xxx\_BIN\5.JOB"  
send: FBO 5JOB  
[3096] Function Execution FAIL.  
send: ACK 3  
Reason of function error : Requested command is not serviced under current state  
send: ACK 0  
length of file name is too long.  
Ready
```

Case 2) File name is empty.

Error message: "empty file name"

```
send: ACK 7  
recv: 05 .PNT 000000LB  
send: ACK 7  
recv: 4 LB  
send: ACK 7  
[3096] Listing of "/" succesfully received.  
empty file name.  
Ready
```

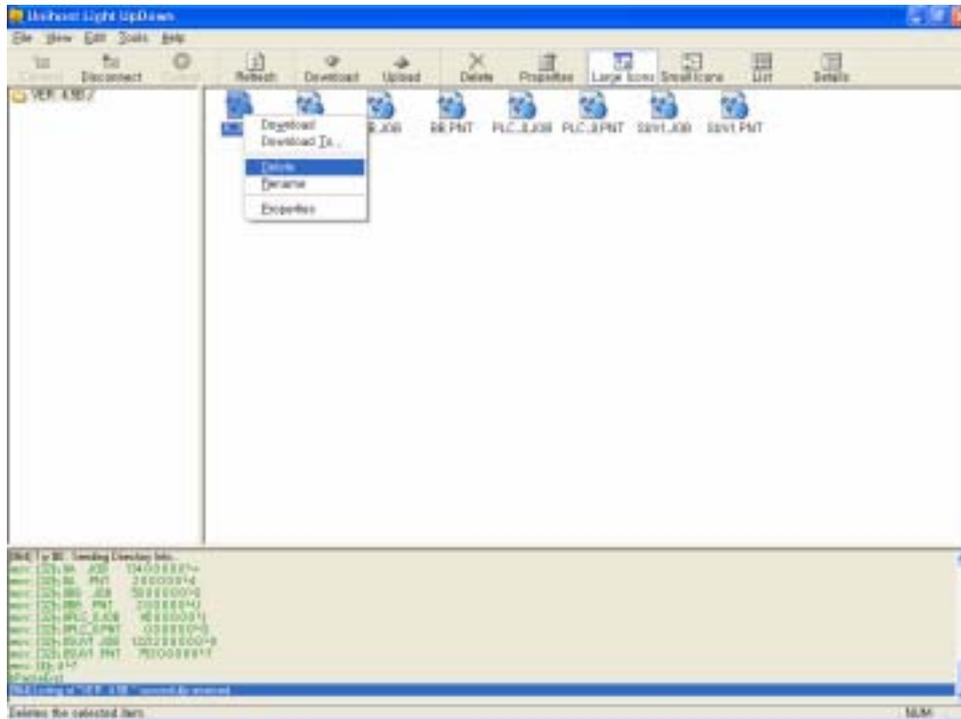
Case 3) File name to change is already exist.

Error message: "Same Destination File Name Exist"

```
send: FGO 201.JOB0 2JOB  
send: FDO **  
[3096] Function Execution FAIL.  
send: ACK 3  
[3096] Try #0 : Sending Directory Info...  
Reason of function error : Same Destination File Name Exist  
send: ACK 0  
Ready
```

## 2.2.6 Delete

It deletes the selected file. It searches the file information after deleting. The error messages are almost same as the case of Write and Read.



## 2.2.7 Exit

It completes and escapes from Unihost.

## 2.3 View Menu

### 2.3.1 Toolbar

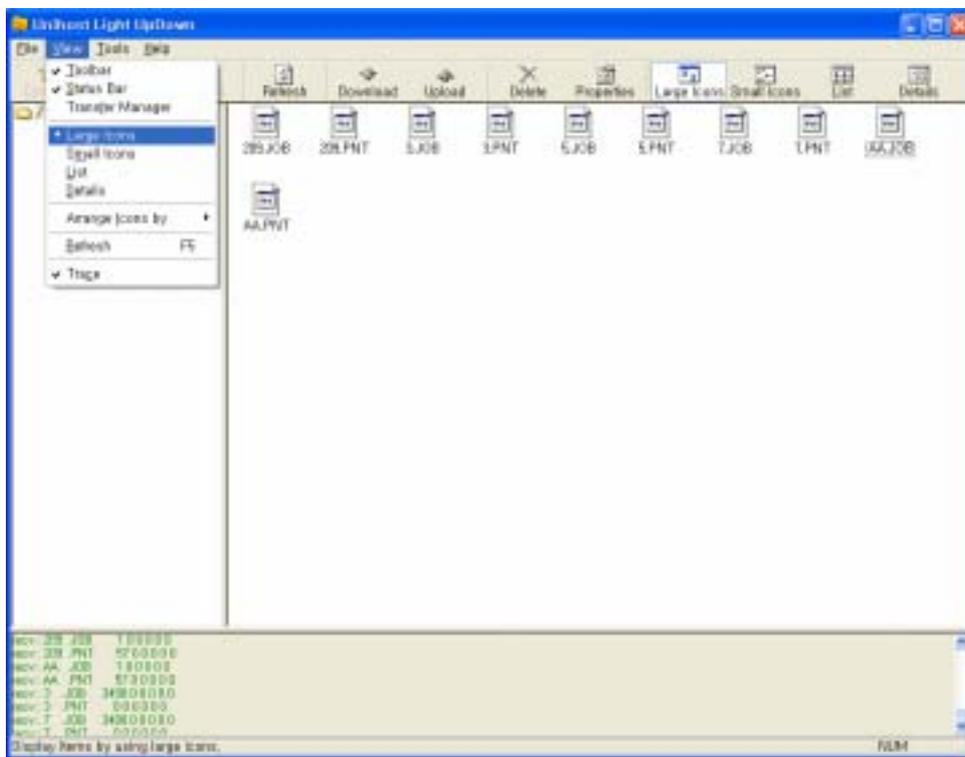
It is to select whether showing Toolbar or not.

### 2.3.2 Status Bar

It is to select whether showing Status Bar or not. .

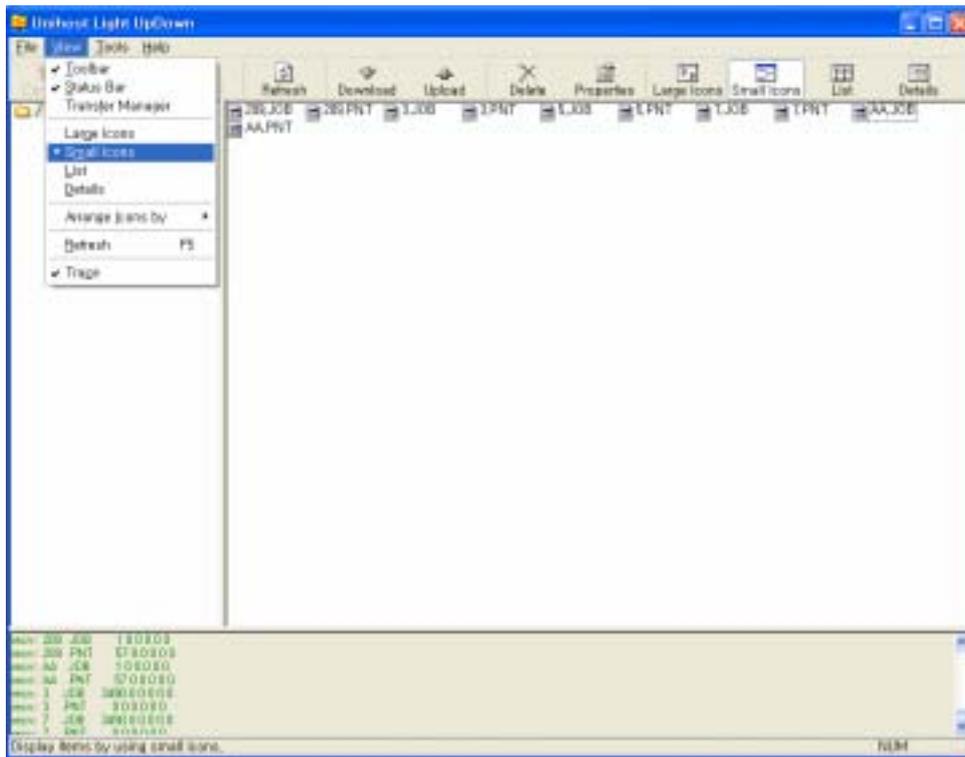
### 2.3.3 Large Icons

By checking it, the files in right side of Window is shown as Large Icon.



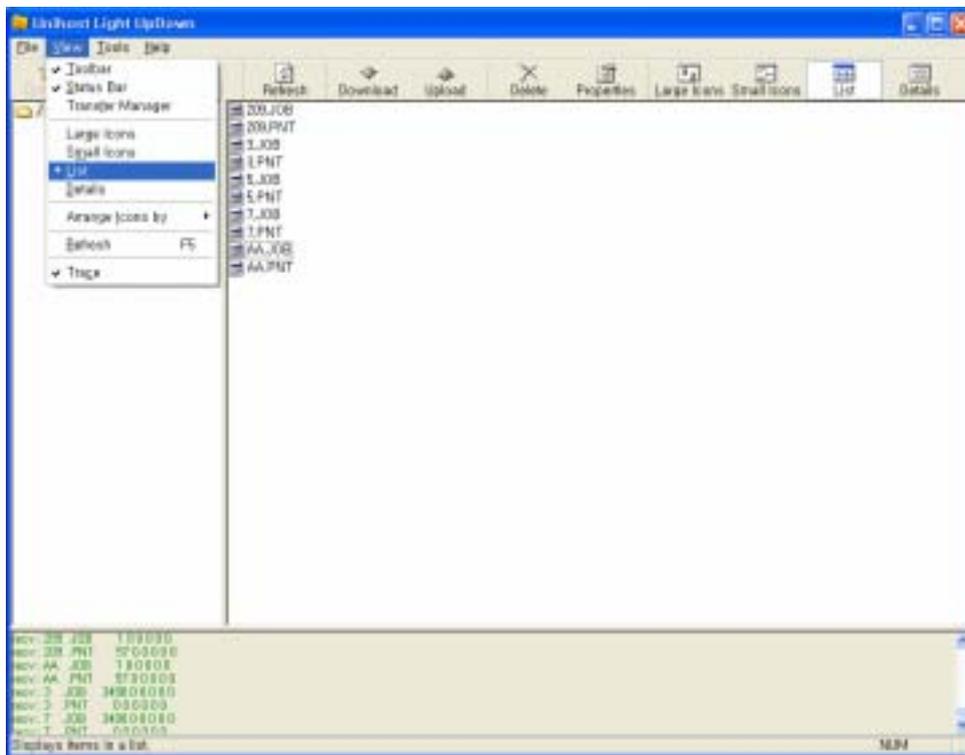
### 2.3.4 Small Icons

By checking it, the files in right side of Window is shown as Small Icon.



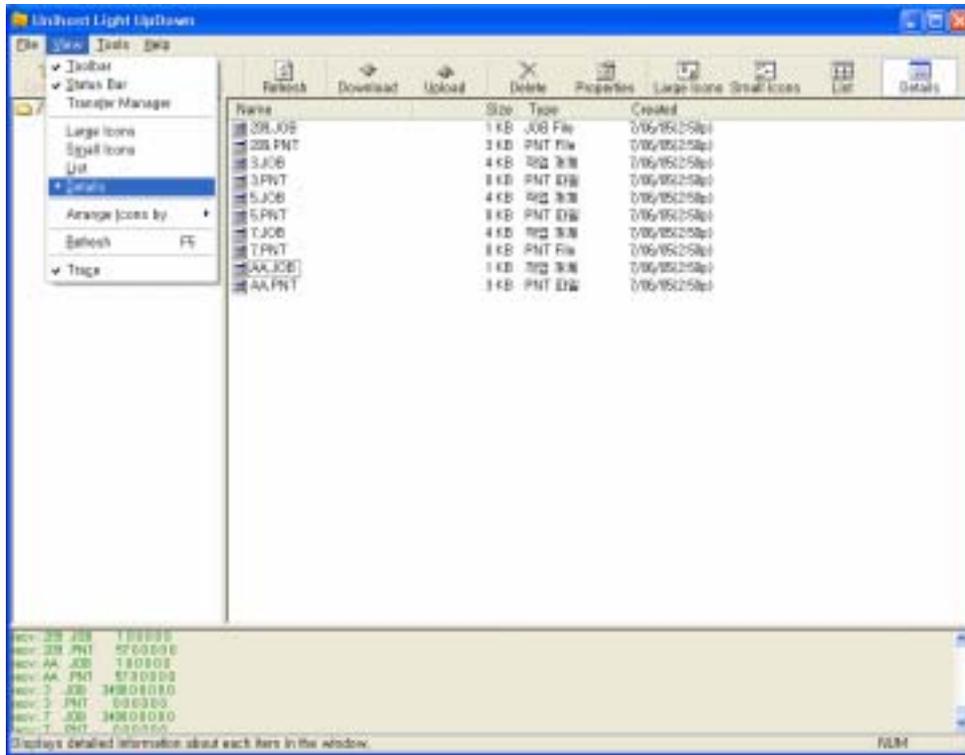
### 2.3.5 List

By checking it, the files in right side of Window is shown as List form.



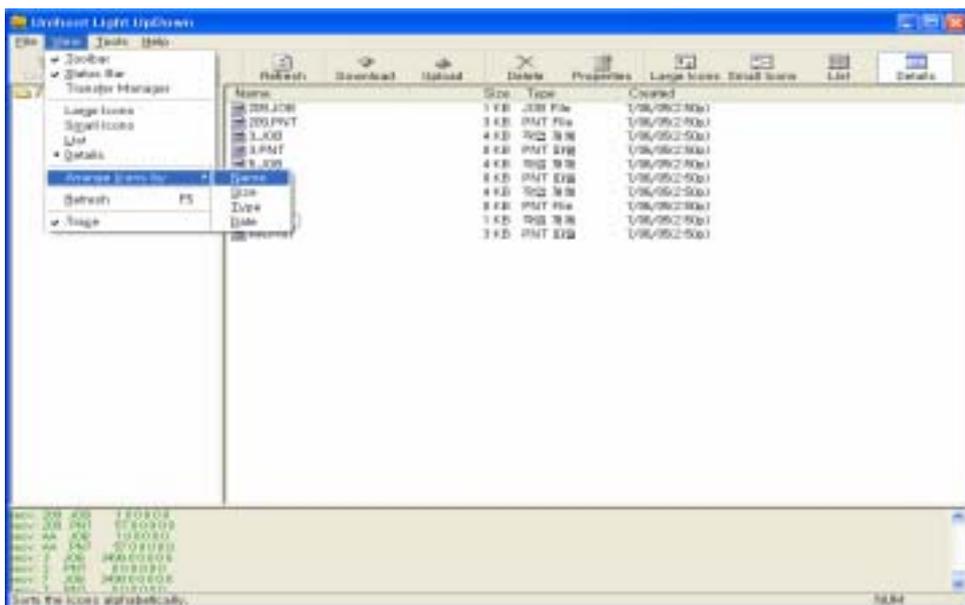
### 2.3.6 Details

By checking it, the files in right side of Window is shown as Detail form.



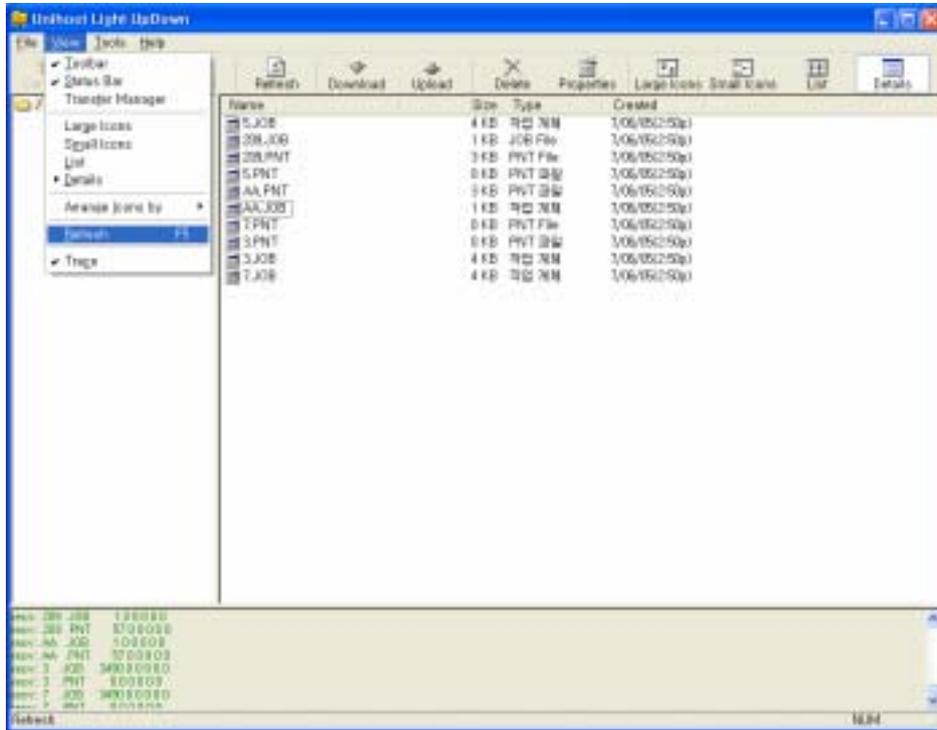
### 2.3.7 Arrange Icons by

It is to arrange the list. There are 4 methods for arranging, by name, size, type, date. The figure in below shows this case.

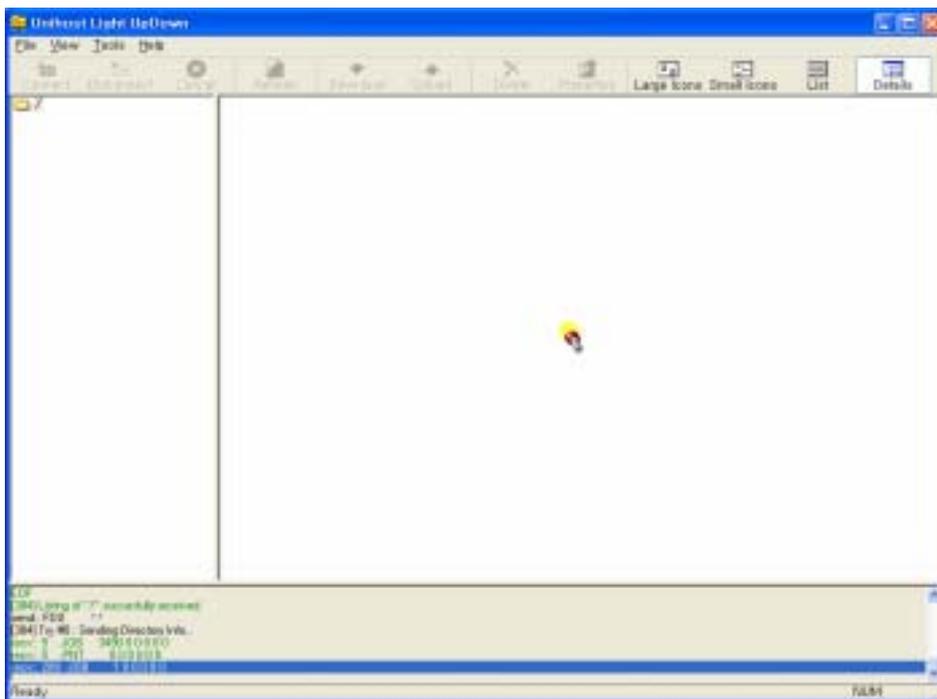


### 2.3.8 Refresh

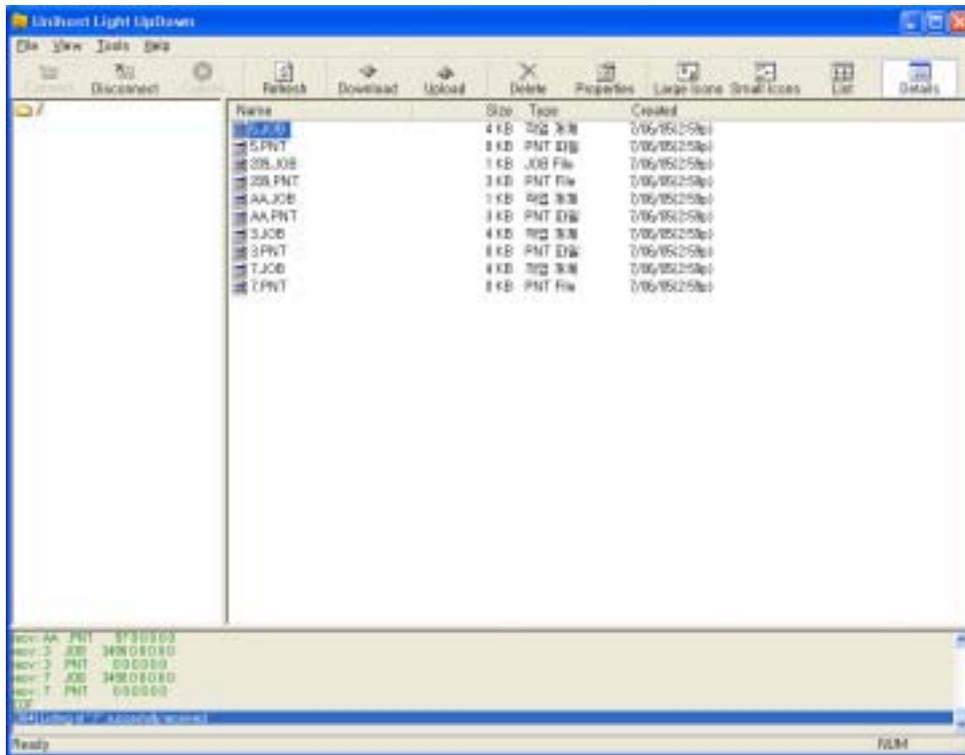
It is to search file list.



While Refresh is in progress, it is not possible to execute other work.



When Refresh is completed, following message is displayed.



The Refresh failure occurs, same as Read failure, when the communication is disconnected and the data is not transmitted correctly between PC and Robot Controller. The measure is also same as the case of Read.

Error: The communication is disconnected.



This is the case of error that PC sends incorrect data to Robot Controller or the data is not received properly by Robot Controller.

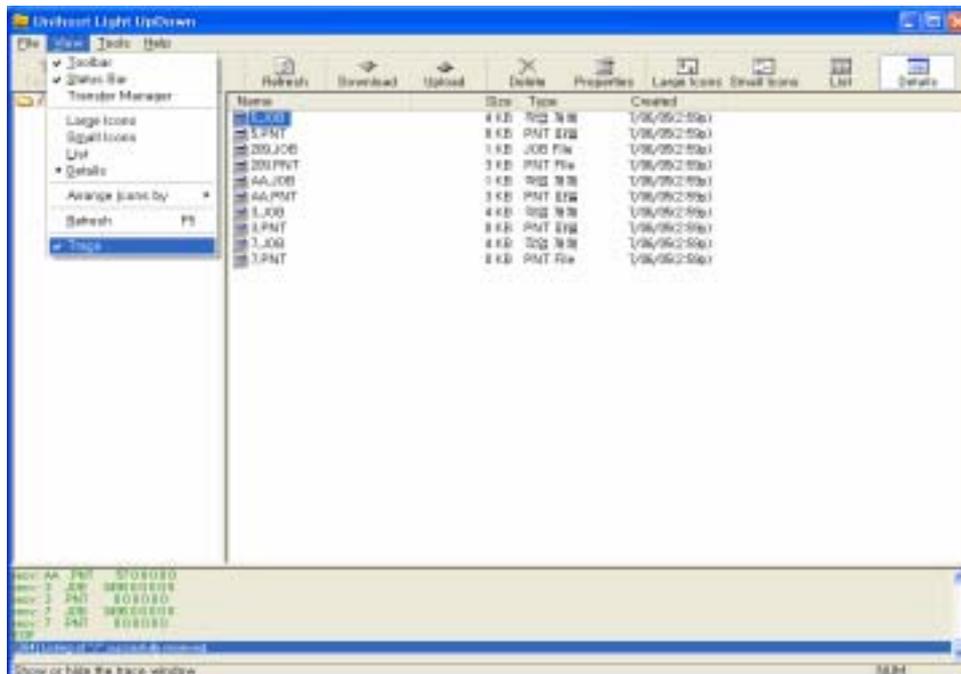
```
[3096] Listing of "/" succesfully received.
send: FDO          * *
[3096] Try #0 : Sending Directory Info...
recv:  01  JOB  114 0 0 0 0 0 4 0
send: ACK 7
[3096] Protocol Error.
send: ACK 2
Ready
```

Error: Robot Controller is not in on-line mode.

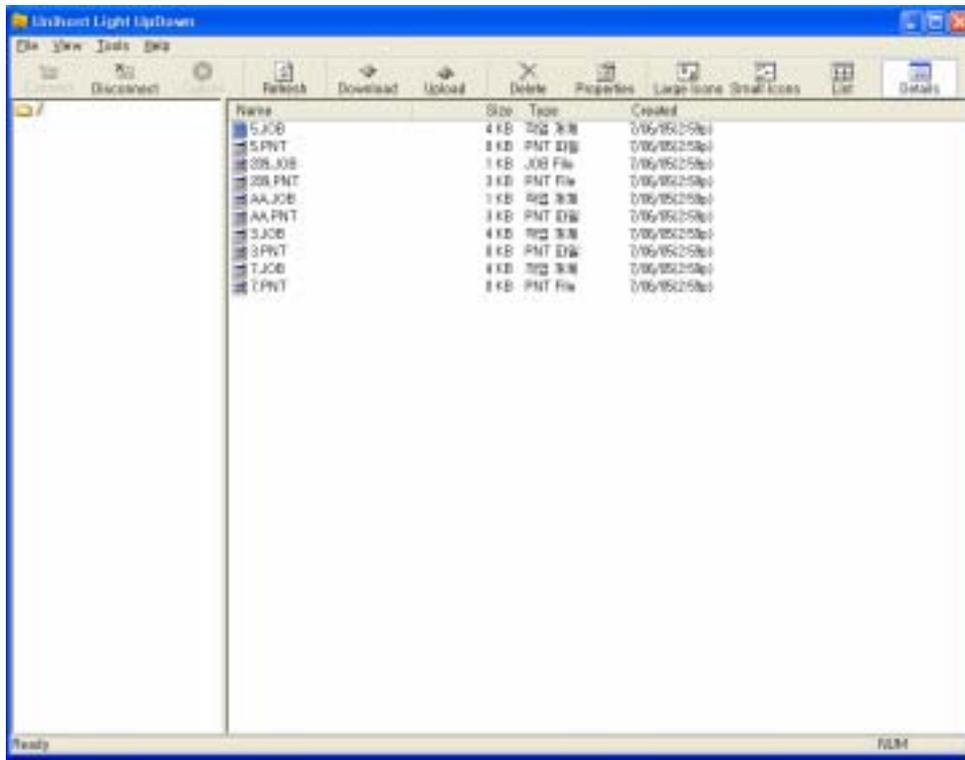
```
send: ACK 2
send: FDO          * *
[3096] Try #0 : Sending Directory Info...
[3096] Function Execution FAIL.
send: ACK 3
Reason of function error : Requested command is not serviced under current state
send: ACK 0
Ready
```

### 2.3.9 Trace

It is to select whether opening the message window at the bottom of display or not.



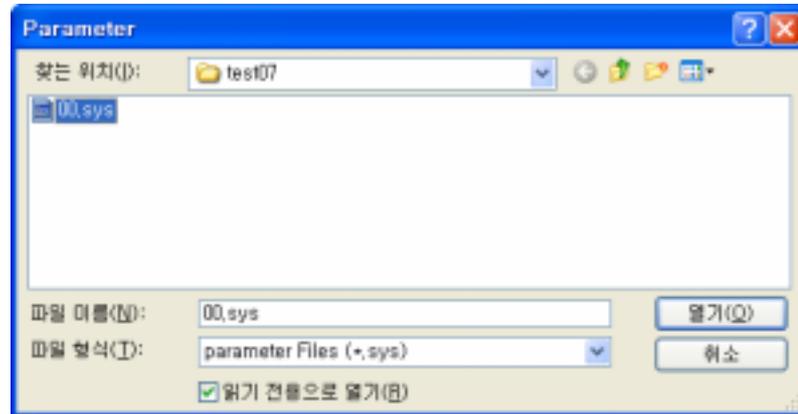
The figure below shows the case of unselecting message window.



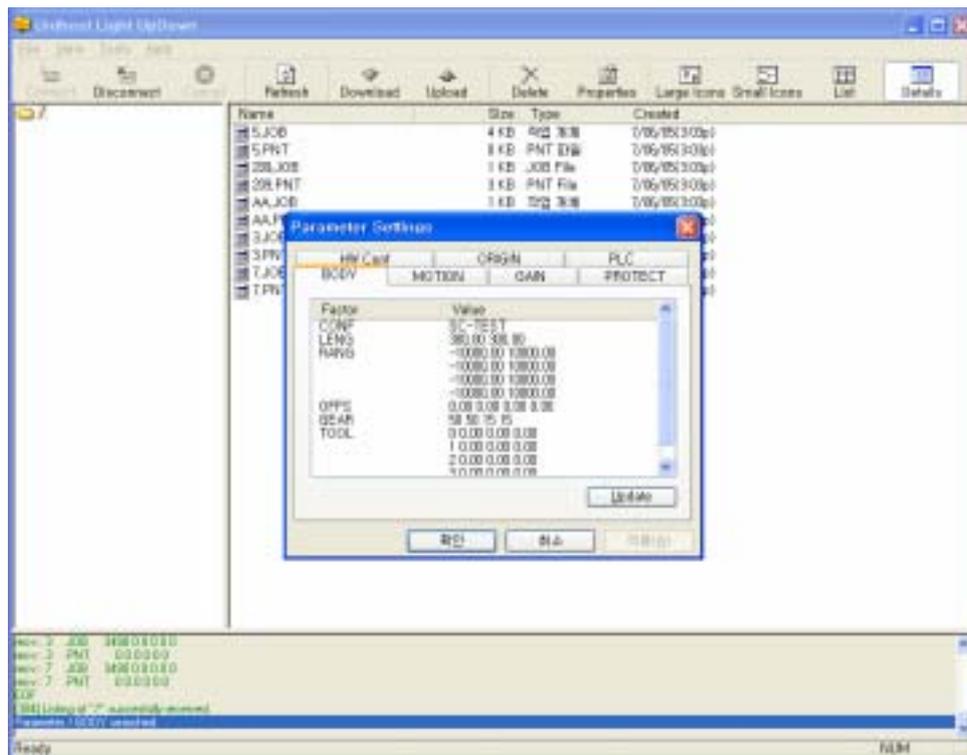
## 2.4 Edit Menu

### 2.4.1 Parameter

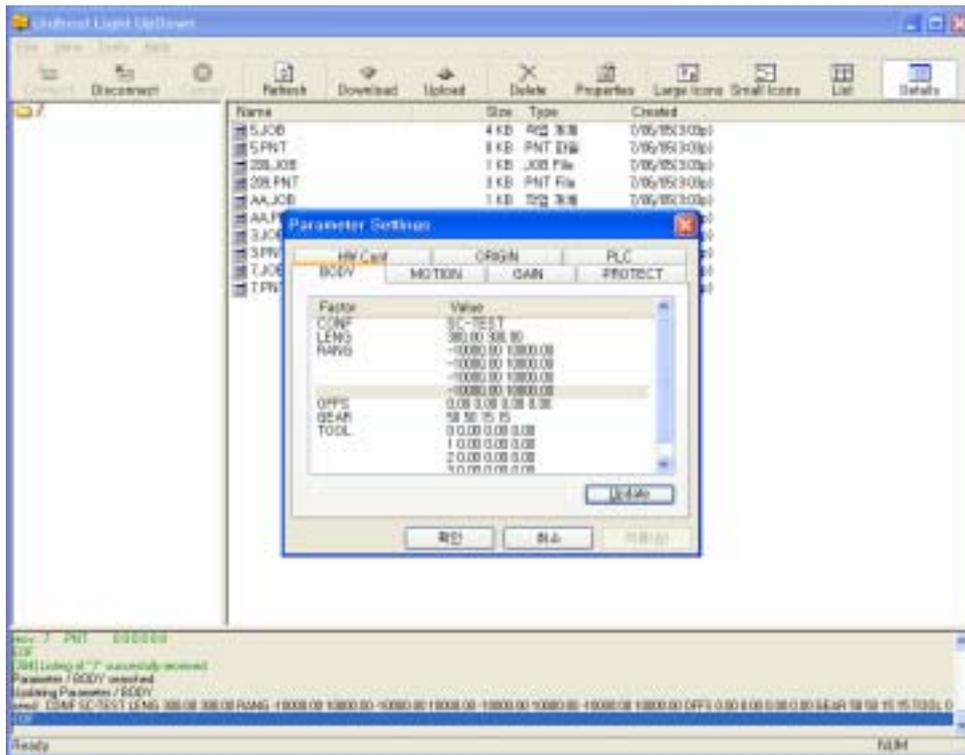
It is to check and change the parameter of Robot Controller.



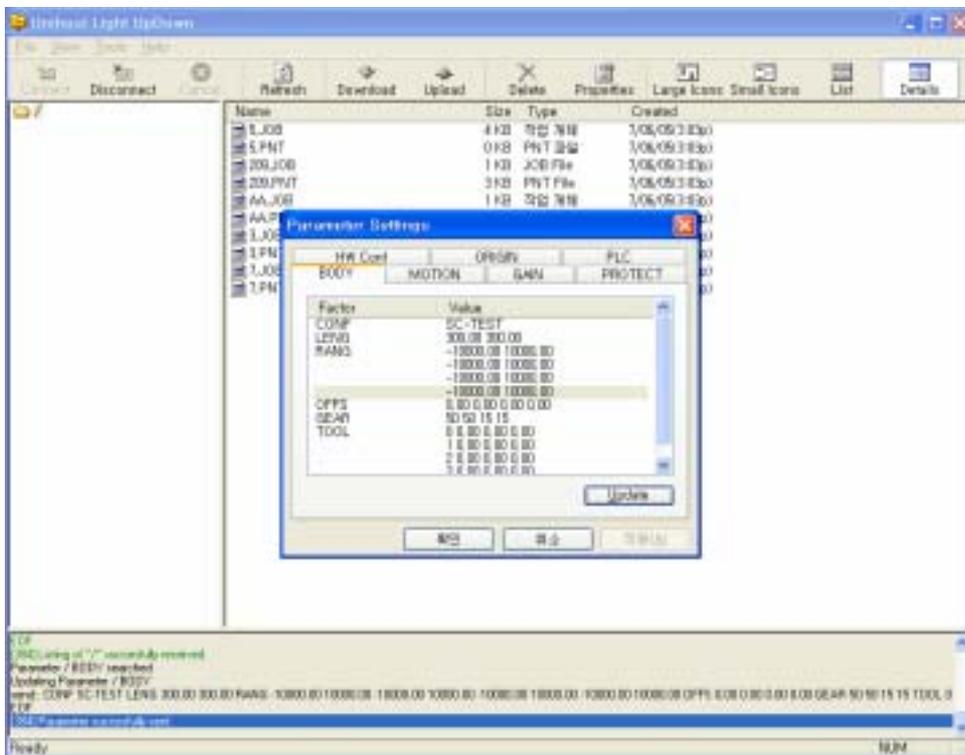
When selecting Edit parameter, the figure below is displayed.



After changing or confirming parameter, transmit it to Robot Controller by pressing Update button.



The figure below shows when the parameter transmission is completed.



The Edit parameter failure occurs, same as Read failure, when the communication is disconnected and the data is not transmitted correctly between PC and Robot Controller. The measure is also same as the case of Read.

Error: The communication is disconnected while data transmission is progressing.

```
send: ACK 8  
send: ACK 9  
[3096] Parameter successfully sent.  
Updating Parameter / BODY  
[1240136] FLAG Received.  
send: CONF SC-TEST LENG 300.00 300.00 RANG -10000.00 10000.00 -10000.00 10000.00  
[3096] Cannot receive an return packet. Please check your communication configuration.  
Ready
```

This is the case of error that PC sends incorrect data to Robot Controller or the data is not received properly by Robot Controller.

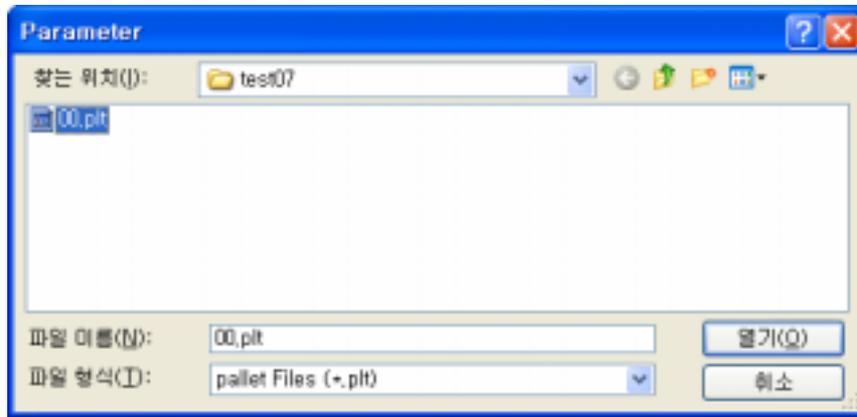
```
Reason of function error : Controller file operation fail  
send: ACK 0  
Updating Parameter / BODY  
[1240136] FLAG Received.  
send: CONF SC-TEST LENG 300.00 300.00 RANG -10  
[3096] Protocol Error.  
send: ACK 2  
Ready
```

Error: Robot Controller is not in on-line mode.

```
send: ACK 2  
Parameter / BODY searched  
Updating Parameter / BODY  
[3096] Function Execution FAIL.  
send: ACK 3  
Reason of function error : Requested command is not serviced under current state  
send: ACK 0  
Ready
```

### 2.4.2 Pallet

It is to confirm or change the pallet data of Robot Controller.



The figure below shows the window of file content.

POINT #	Contents	Value1	Value2	Value3
NO 0	DATA	3	2	1
	CNT	1	1	1
	OUT	0	0	0
	PAT	0		
NO 1	DATA	1	6	1
	CNT	2	2	1
	OUT	16	300	4
	PAT	0		
NO 2	DATA	2	6	1
	CNT	1	1	1
	OUT	16	300	4
	PAT	0		
NO 3	DATA	2	6	1
	CNT	1	1	1
	OUT	16	300	4
	PAT	0		
NO 4	DATA	2	6	1
	CNT	1	1	1
	OUT	16	300	4
	PAT	0		
NO 5	DATA	2	6	1
	CNT	1	1	1
	OUT	16	300	4
	PAT	0		

Note) The current version of Unihost (Ver.1.2) does not update to Robot Controller in this mode.

## 2.5 Tools Menu

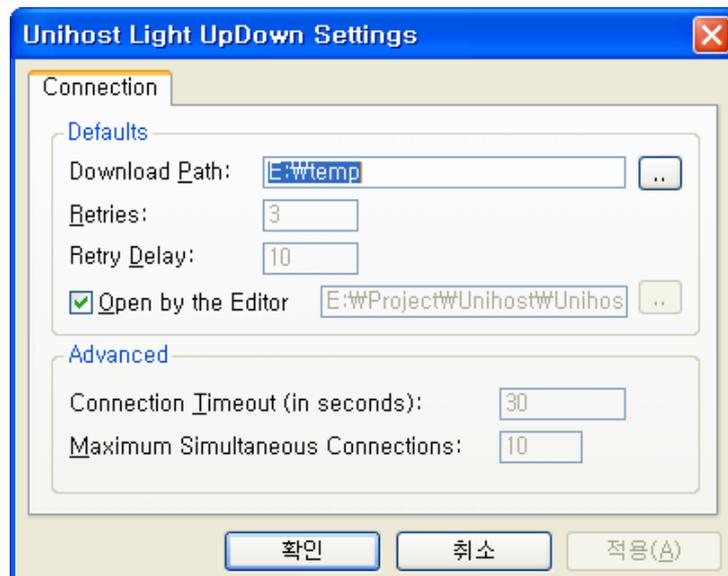
This menu provides the Program condition setup and parameter confirmation / modification.

### 2.5.1 Options

It sets the value of program condition.

The default Read Path can be replaced by user's desire.

By calling jEditor through "Open by the Editor", JOB and PNT data are displayed on window when Reading



### 2.5.2 Communication setup

