

Robostar Robot Controller Manual

Robostar Robot Controller

Controller Series-IRC

UNIHOST Manual



- Controller Manual
- Operation Manual
- Programming Manual
- Unihost Manual
- Simple Operation Manual

Robostar Robot Controller Manual

Robostar Co., Ltd

RoboStar



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- (7) Failure due to the negligence of conducting maintenance and inspection work as specified in the operation manual and the instruction manual.
- (8) Damages other than robot repair costs.

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# Configuration of the Instruction Manual

The instruction manual of this product consists of the following. The first user of this product must be well aware of all contents of this manual before use.

## ■ Controller Manual

Describes general details about a controller. Such as controller overview, installation and how to interface with an external device.

## ■ Operation Manual

Describes overall methods of controller use as well as parameter setup, JOB program editing and robot drive.

## ■ Programming Manual

Describes a Robostar robot program, RRL (Robostar Robot Language), and how to write a robot program by RRL.

## ■ Unihost Manual

Describes 'Unihost', a Robostar online PC program.

## ■ Simple Operation Manual

Describes a summary of the necessary parts based on 'Operation and Application Manual'.

# Configuration of the Instruction Manual

The instruction manual of this product consists of the following..

- Ch.1 How to Use the File Transfer

Describes overall details about how to use a 'File Transfer'.

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## Ch.1 How to Use a File Transfer



### Contents

- 1.1 OPEN A FILE TRANSFER
- 1.2 DESCRIPTION OF A FILE TRANSFER
- 1.3 CREATE AND OPEN A PROJECT
- 1.4 CONNECT (COMMUNICATION CONNECTION)
- 1.5 DISCONNECT (COMMUNICATION DISCONNECTION)
- 1.6 SET A 'JOB EDITOR' EXE FILE PATH
- 1.7 FETCH A 'JOB EDITOR' FILE
- 1.8 EXPORT A 'JOB EDITOR' FILE
- 1.9 DELETE A 'JOB EDITOR' FILE
- 1.10 EDIT A 'JOB EDITOR' FILE
- 1.11 CHECK 'JOB EDITOR' EDITS FOR ERROR (COMPILE)
- 1.12 RENEW A 'JOB EDITOR' FILE
- 1.13 DRIVER MODE

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## 1.1 Open a File Transfer

- Run the 'File Transfer' in the procedure as shown in the figure below.

### ■ OPEN Procedure

#### Step 1

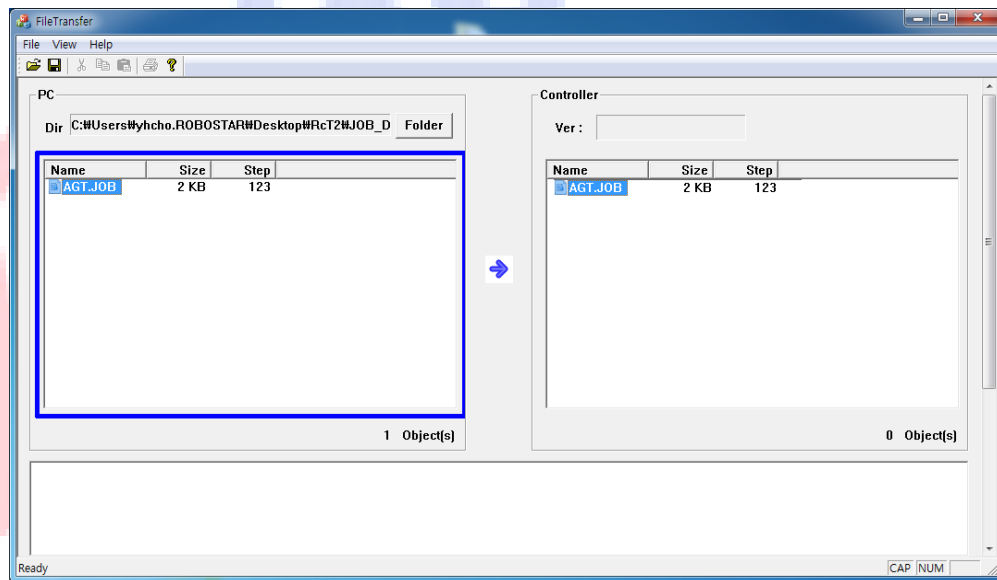
#### Menu Screen



- To input, edit and verify a program, run the 'File Transfer' on PC.
- @ : Click the 'File Transfer' icon.

#### Step 2

#### File Transfer Screen



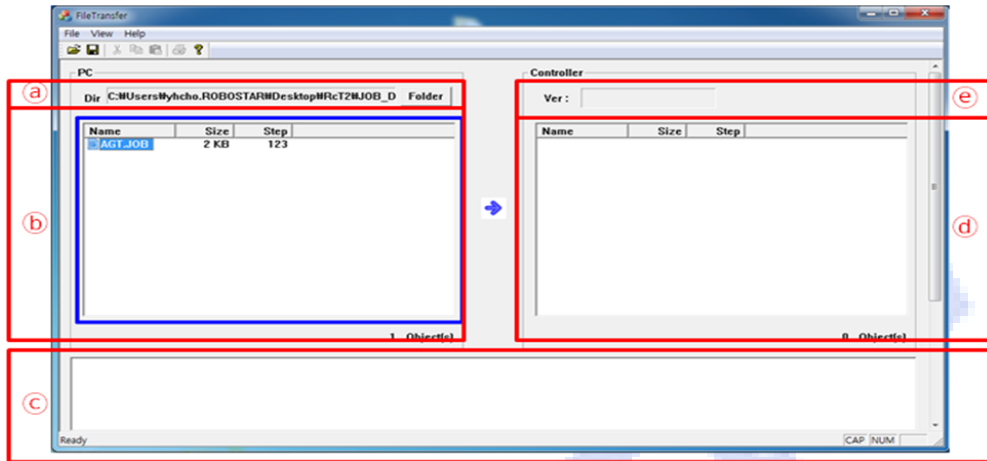
- Once successful, a 'File Transfer Edit' screen comes up.
- The 'File Transfer' enables easily transmitting and receiving files and parameters between the robot controller and the computer.

## 1.2 Description of a File Transfer

- The figure below describes the basic screen of the 'File Transfer'.

### Step 1

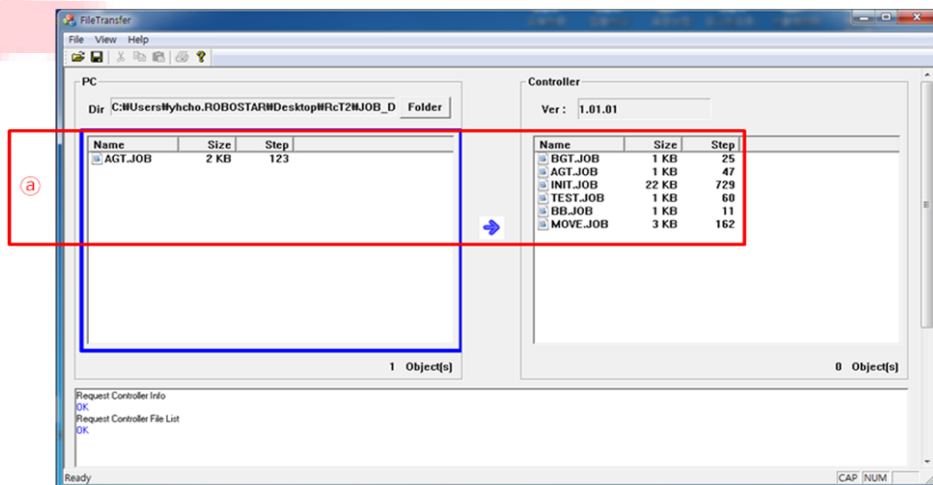
#### Basic Screen of a File Transfer



- (a) : Shows a project folder on PC. To change the work folder, select the button in the ComboBox and a folder change window comes up.
- (b) : Refers to a file list window on PC, showing the 'Editor file' list in the work folder. The blue rim shows the currently-selected window.
- (c) : A Tracy window that outputs PC-Controller data and error messages.
- (d) : Displays the file list of a Controller for the selected channel through a file list window of a Controller.
- (e) : Displays a Controller Version.

### Step 2

#### File Transfer JOB Screen



- (a) : Shows a 'Job Editor' file.

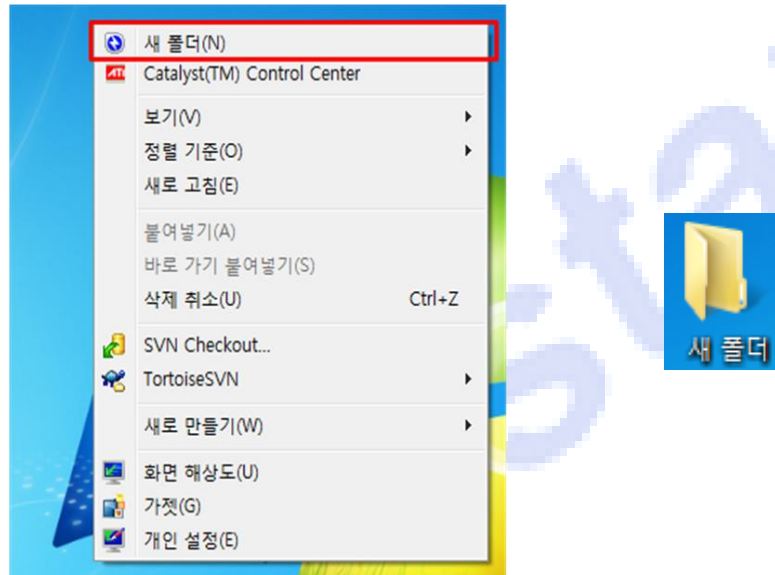
## 1.3 Create and Open a Project

### 1.3.1 Create a Project Folder

- Is created when making a new project file or when wanting to receiving controller's parameter data.

#### Step 1

#### Create a Project Folder



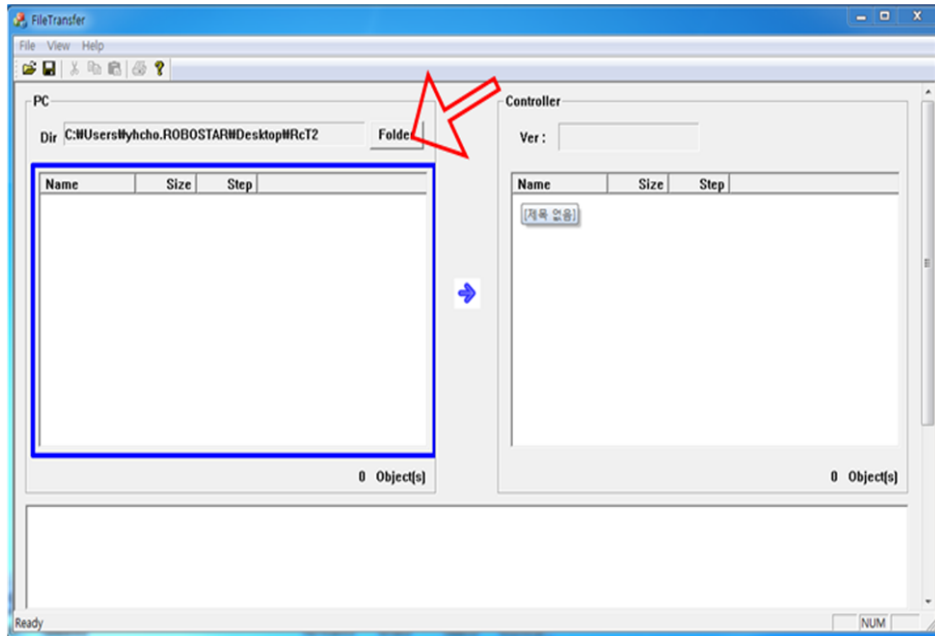
- Click the right mouse button on the desktop.
- Select [New Folder] from the list.
- When a new folder is created, change the folder name.

### 1.3.2 Open a Project

- Fetch a project file.

#### Step 1

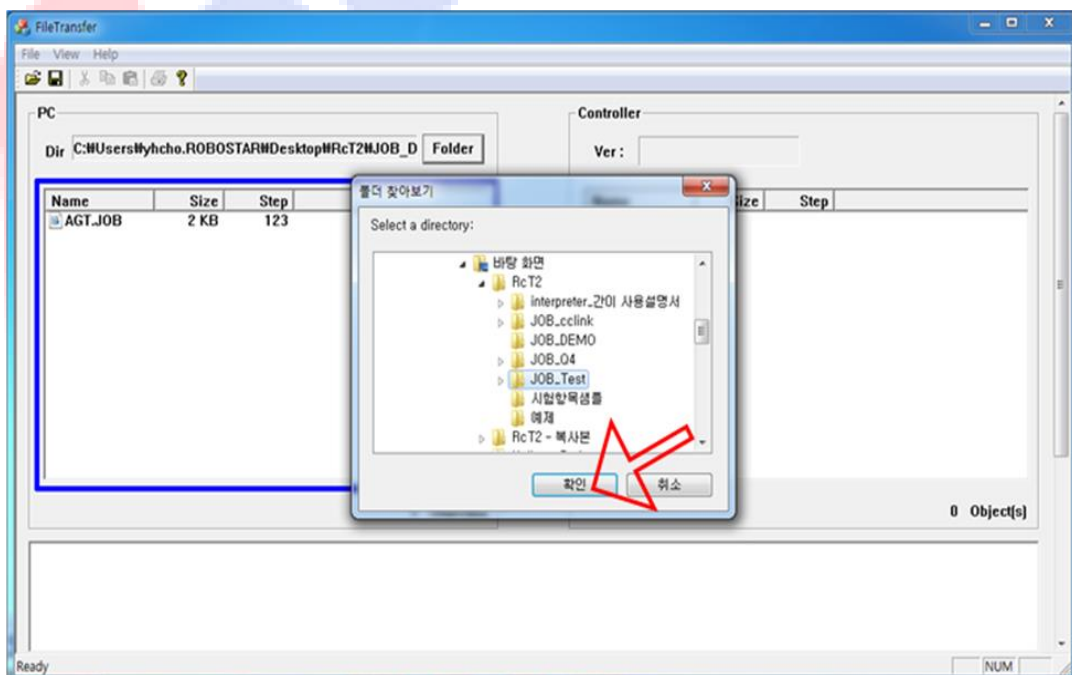
#### Open a Project File



- Click the [Folder] button to activate an exe file open dialog box.

#### Step 2

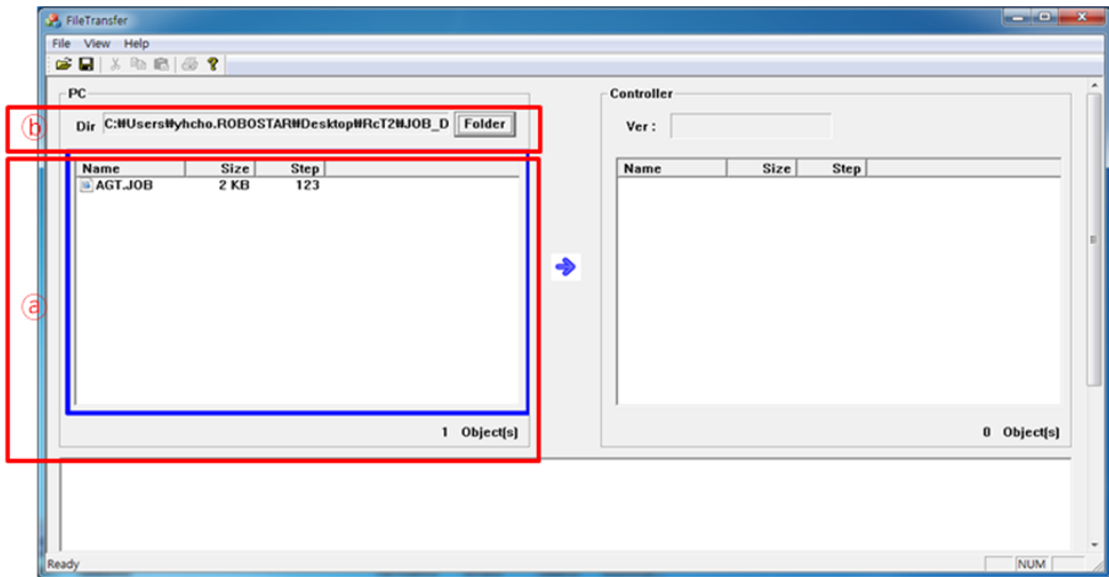
#### Open a Project File



- Select a desired folder and click the [Confirm] button.

Step 3

Project File



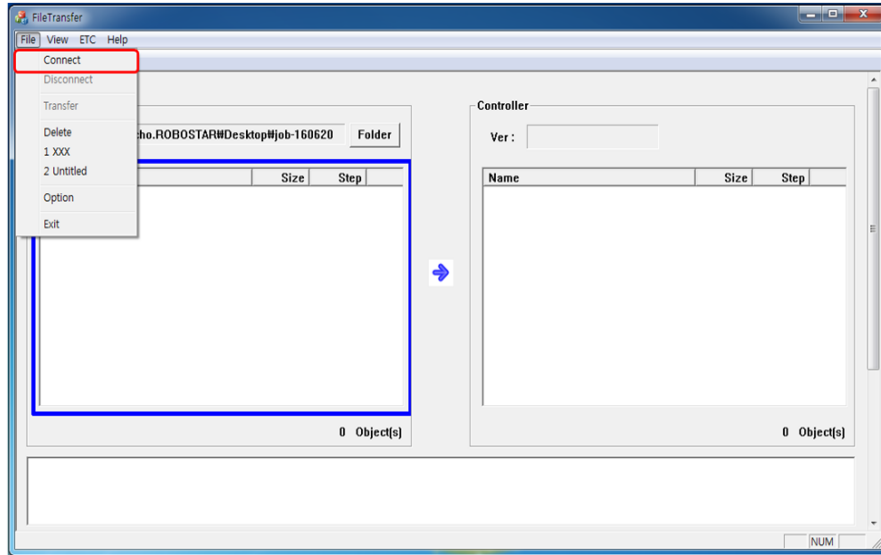
- @ : Shows an exe file list in the work folder on the file list window.
- b : Displays the changed file path.

### 1.4 Connect (Communication Connection)

- Becomes activated when the computer and the robot controller are disconnected, being selected when there is a need for a connection between the computer and the robot controller.

#### Step 1

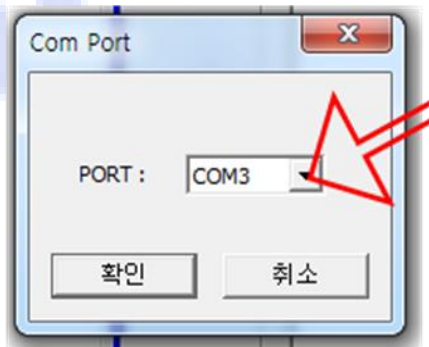
#### Communication Connection



- Click a Select Menu [File] on the top-right corner of 'File Transfer', then select [Connect] menu.

#### Step 2

#### RS-232C Communication Option Setting

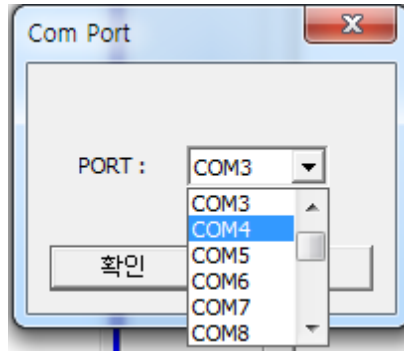


- Click the PORT setting button.

#### Step 3

#### RS-232C Communication Port Setting

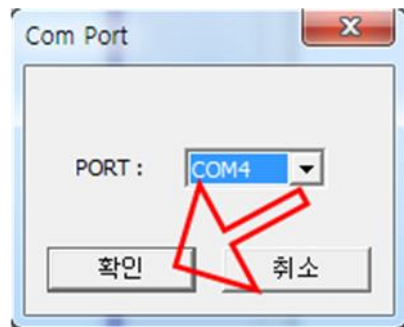




- Click the communication port connected to PC.

Step 4

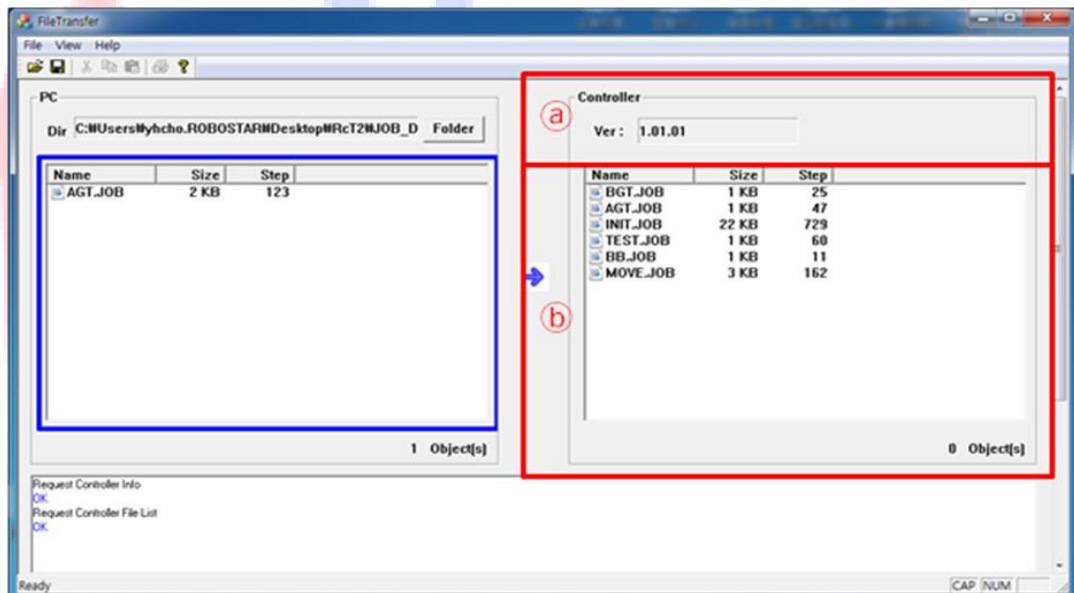
RS-232C Communication Port Setting



- Set the communication port and click [Confirm] button.

Step 5

Screen Connected to Controller



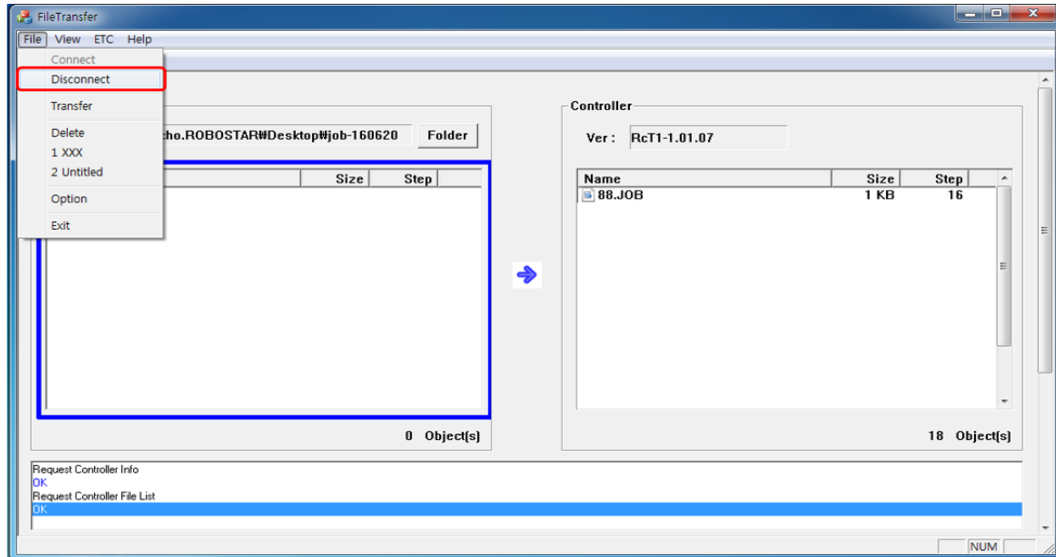
- ① : Shows the controller version information.
- ② : Shows an 'Editor file' list on the controller file list window.

### 1.5 Disconnect (Communication Disconnection)

- Shows the file list in the work folder on the file list window. Activated only when the computer and the robot controller are connected to each other and used to remove the connection between the computer and the controller.

#### Step 1

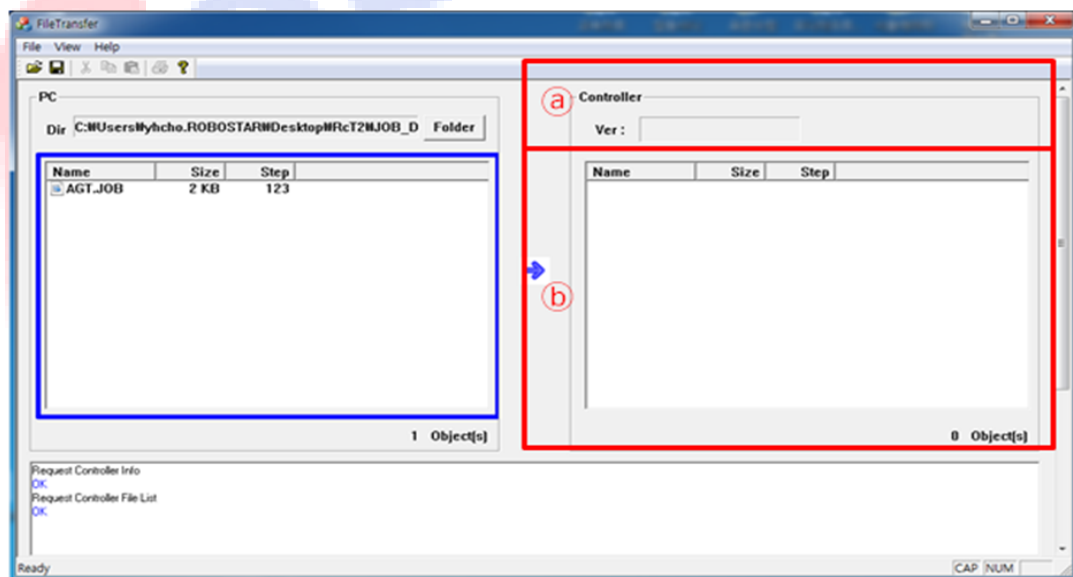
#### Disconnection



- Click the select menu [File] in the top-right corner of 'File Transfer' and select [Disconnect] menu.

#### Step 2

#### Screen Disconnected from Controller



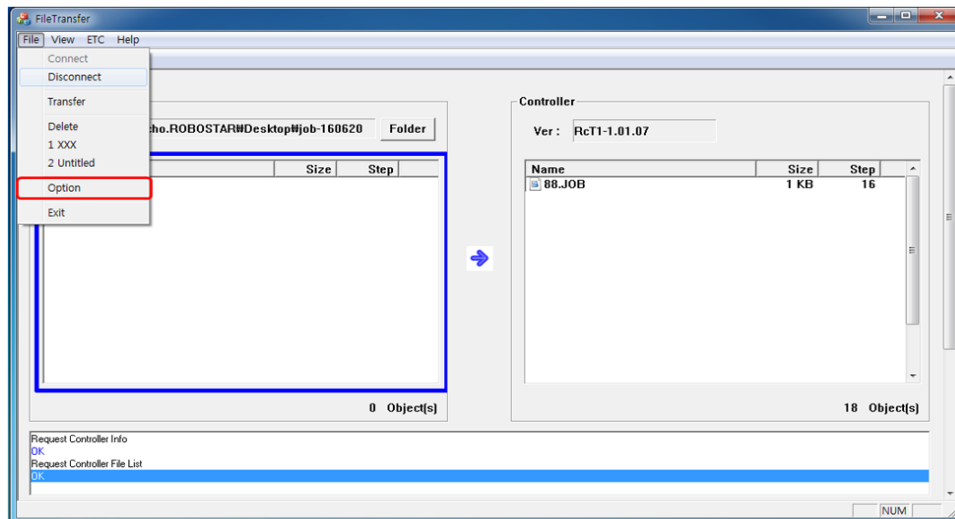
- @ : Controller version information is not shown.
- b : 'Editor file' list is not shown on the controller file list window.

## 1.6 Set a 'Job Editor' Exe File Path

- Assigns a path again when the 'Job Editor' file selected from the file list window is not opened.

### Step 1

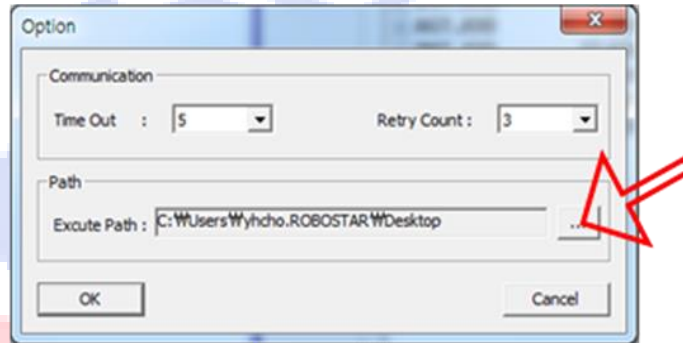
#### Open Option



- Click the select menu [File] in the top-right corner of 'File Transfer' and select [Option] menu.

### Step 2

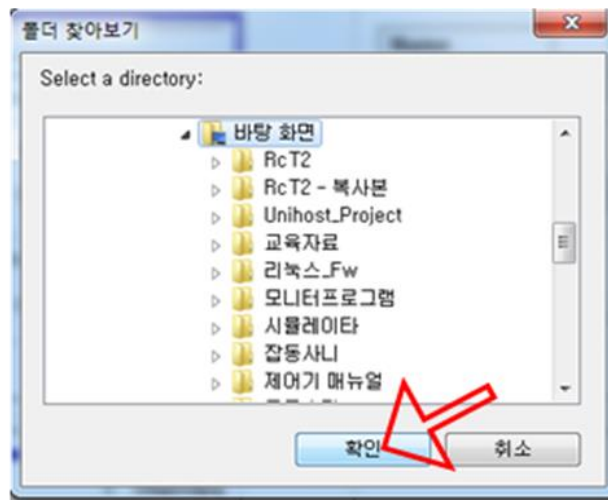
#### Activate Configuration Dialog Window



- Configuration dialog window comes up. Press [Path] dialog window button to assign a path.

### Step 3

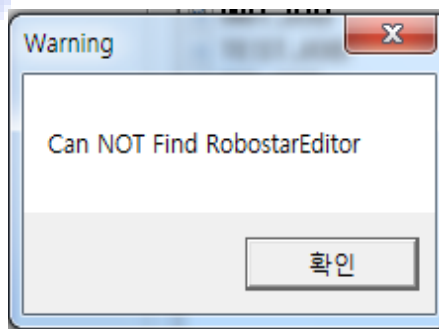
#### Search Path



- ① Should be the same as the folder where Reditor' is located. If not the same, 'Job Editor' function may not operate normally.
- When the path setup is completed, press [Confirm] button to reflect the path in 'File Transfer'.

Step 4

Path Assign FAIL



- When path setup is incorrectly made, run the file list 'Job Editor' and a message comes out as shown in the figure.

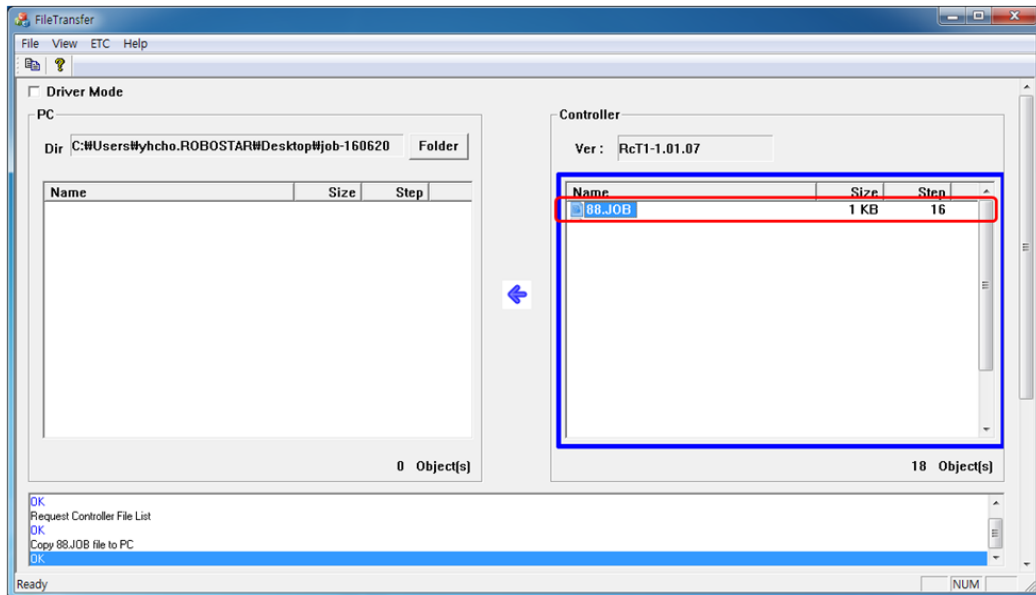
## 1.7 Fetch a 'Job Editor' File

- Fetches a 'Job Editor' file in the controller to PC.
- There are two more ways to fetch it and only one of the two should be selected and used.

### 1.7.1 How to Fetch a 'Job Editor' File (1)

#### Step 1

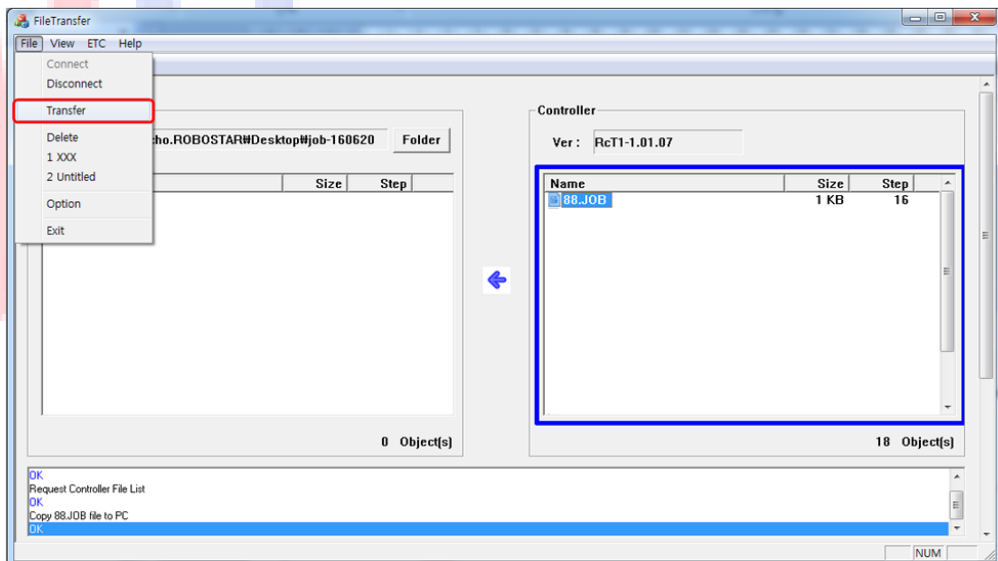
Select Controller's 'Job Editor' File



- While pressing [Shift] key, select a Controller's 'Job Editor' file to fetch.

#### Step 2

Select 'Job Editor' File Transfer Menu

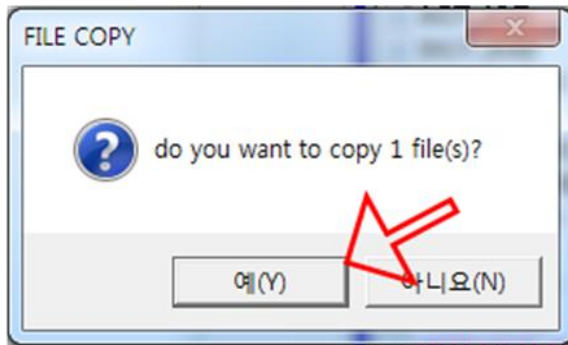


- Click the select menu [File] in the top-right corner of 'File Transfer' and select [Transfer]

menu.

Step 3

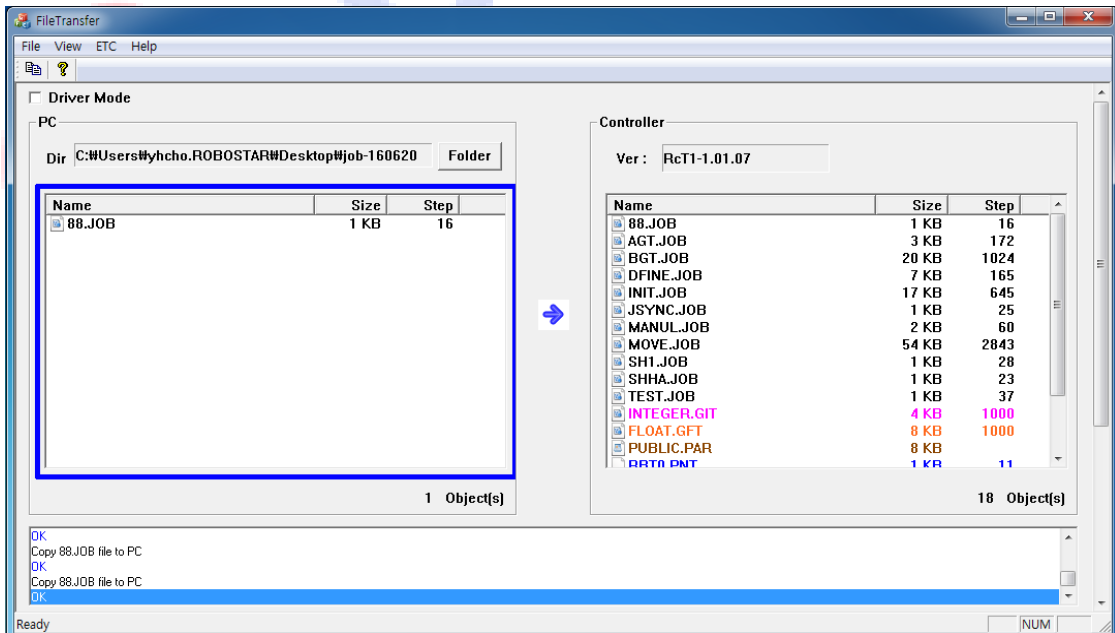
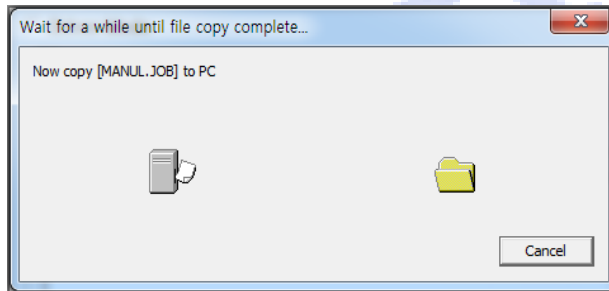
Run 'Job Editor' File Transfer



- Click [Confirm] button.

Step 4

Confirm 'Job Editor' File Transfer



- When the pop-up window gets activated to advise of the in-progress transfer before completing the transfer, OK message comes out on the 'Trace' window.

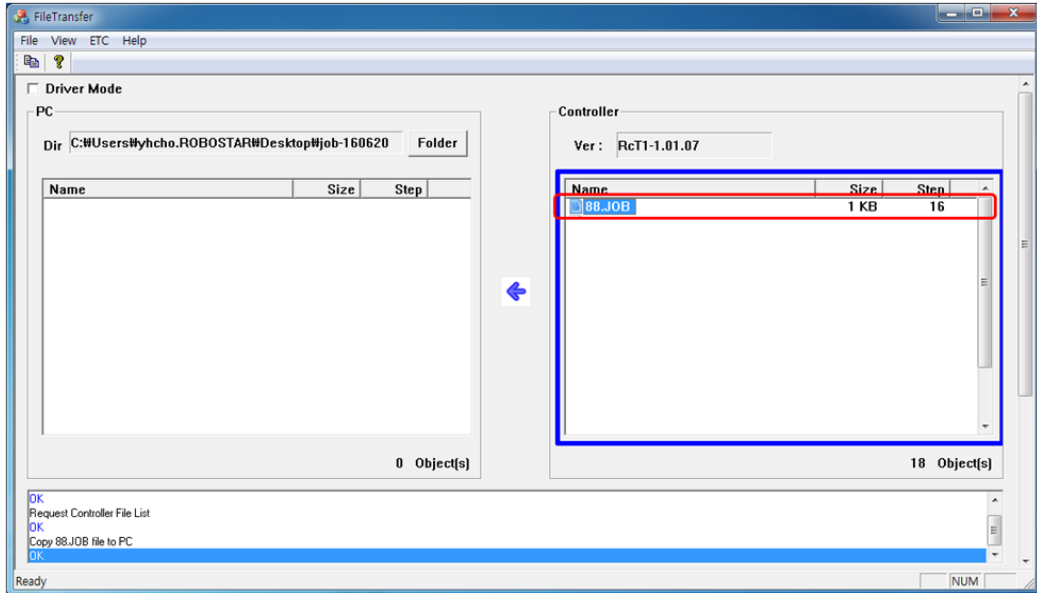
- The transferred 'Job Editor' file can be confirmed on the PC 'File list' window.

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## 1.7.2 How to Fetch a 'Job Editor' File (2)

### Step 1

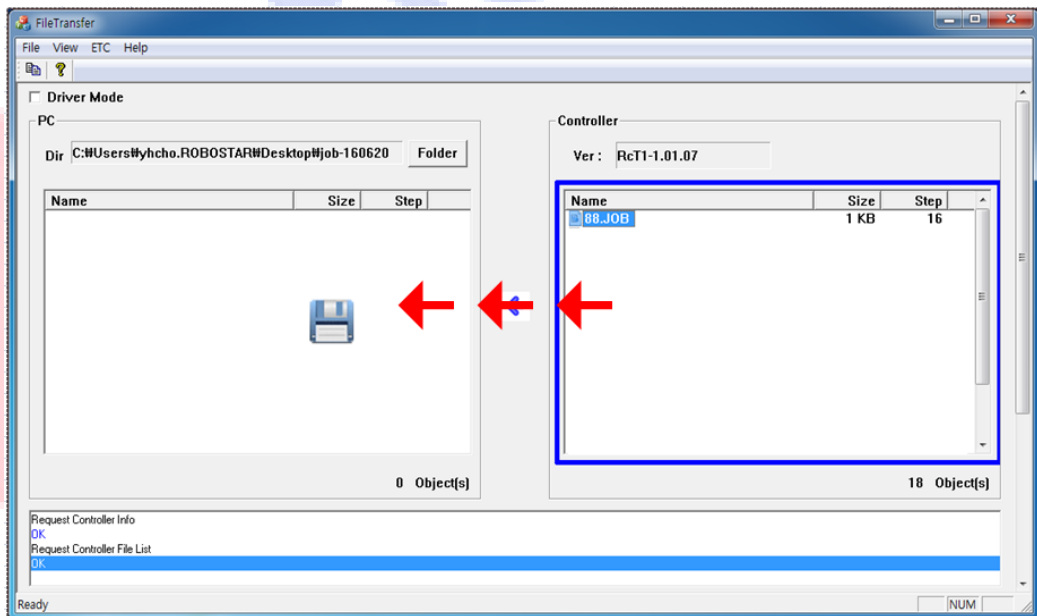
Select Controller's 'Job Editor' File



- While pressing [Shift] key, select a Controller's 'Job Editor' file to call.

### Step 2

Select 'Job Editor File' Transfer Menu

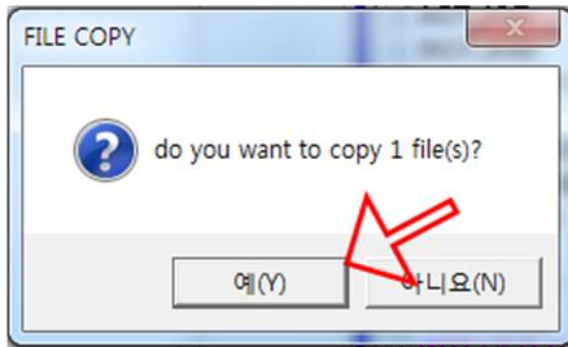


- Select a 'Job Editor' file to transfer, press the left mouse button and move it toward the 'PC file list' window. As shown in the figure, 'Floppy disk' icon comes up in 'PC file list'.



Step 3

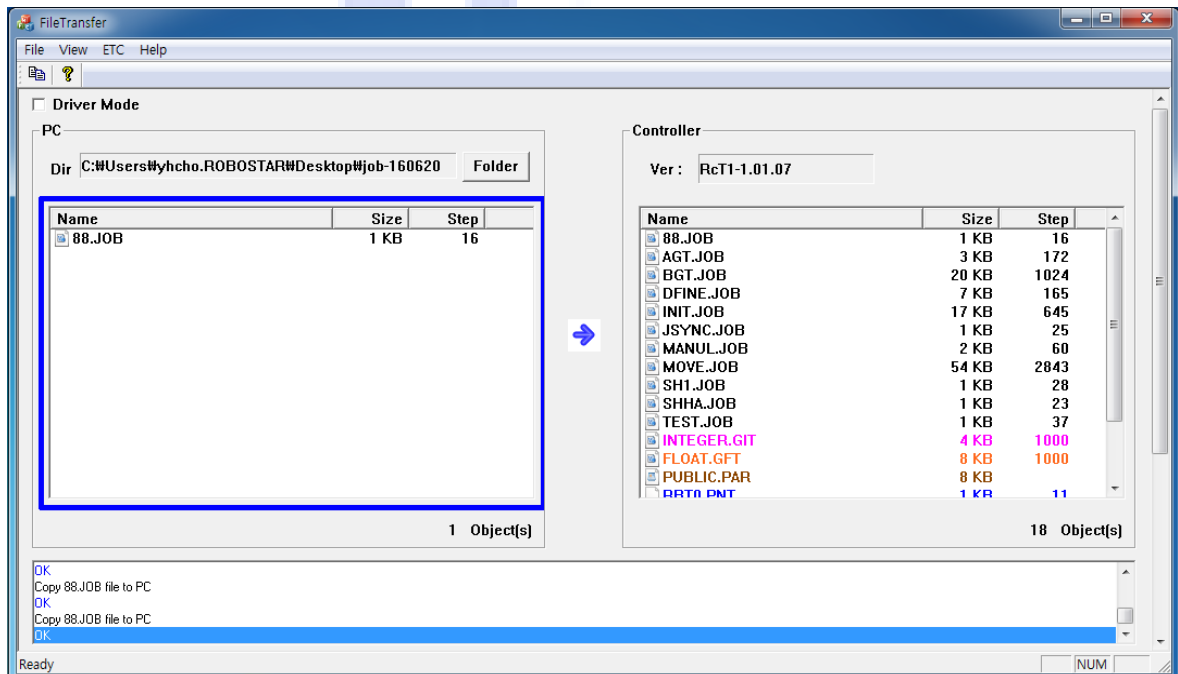
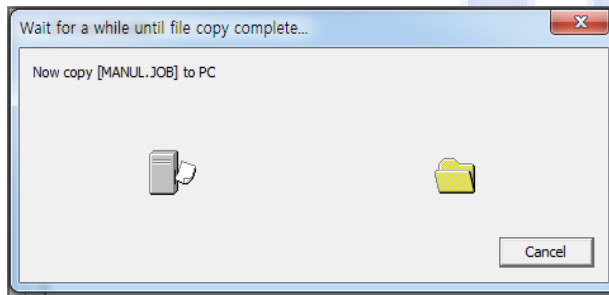
Run 'Job Editor' File Transfer



- Click [Confirm] button.

Step 4

Confirm 'Job Editor' File Transfer



- When the pop-up window gets activated to advise of the in-progress transfer before completing the transfer, OK message comes out on the 'Trace' window
- The transferred 'Job Editor' file can be confirmed on the PC 'File list' window.

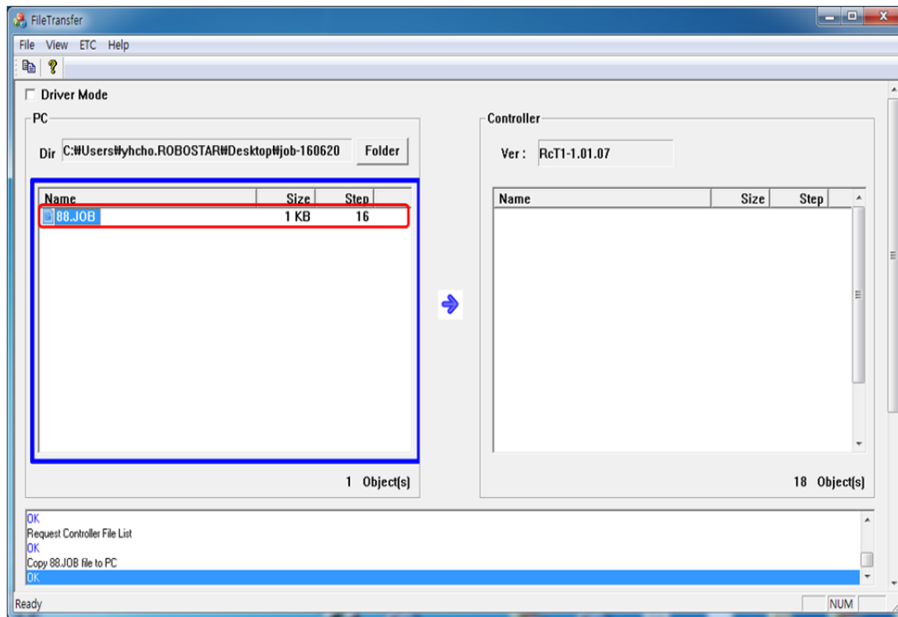
## 1.8 Export a 'Job Editor' File

- Exports a 'Job Editor' file on PC to 'Controller'.
- There are two more ways to export, only one of the two can be selected and used.

### 1.8.1 How to Export a 'Job Editor' File (1)

#### Step 1

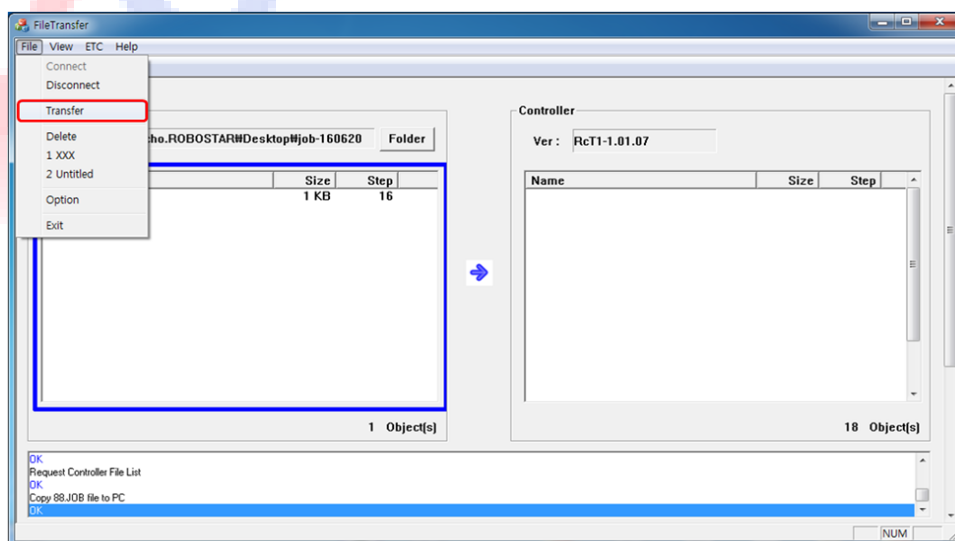
Select 'Job Editor' File on PC



- While pressing [Shift] key, select a PC's 'Job Editor' file to export.

#### Step 2

Select 'Job Editor' File Transfer Menu

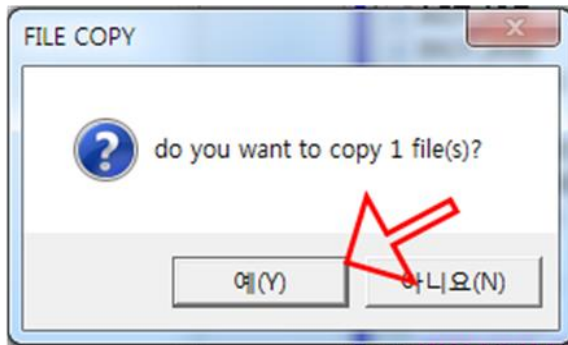


- Click the select menu [File] in the top-right corner of 'File Transfer' and select [Transfer]

menu.

Step 3

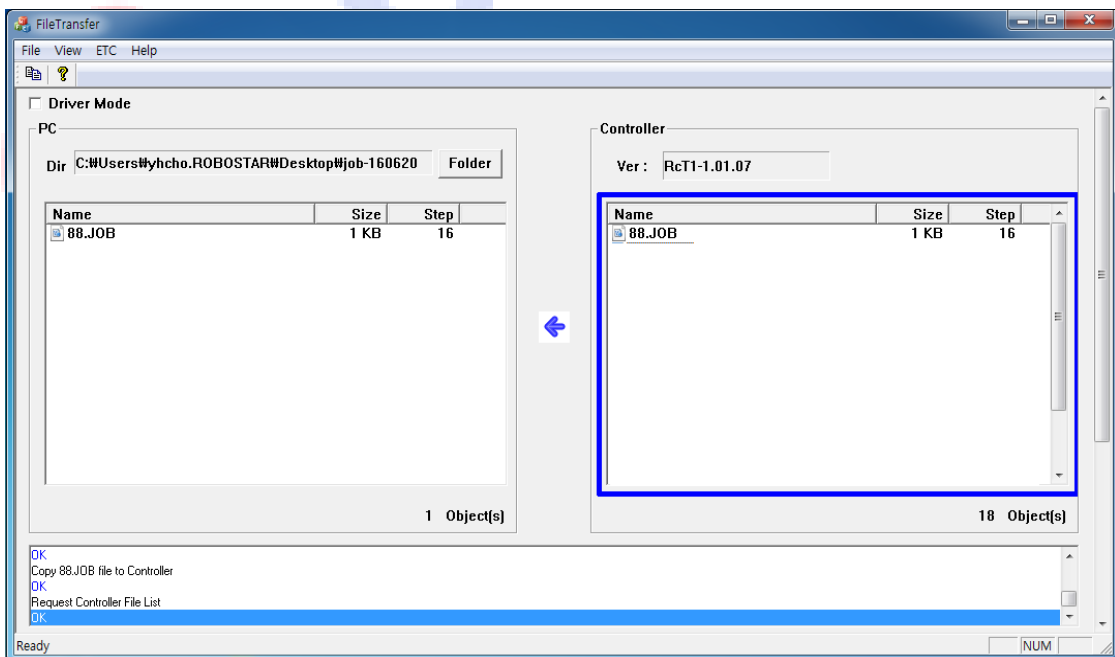
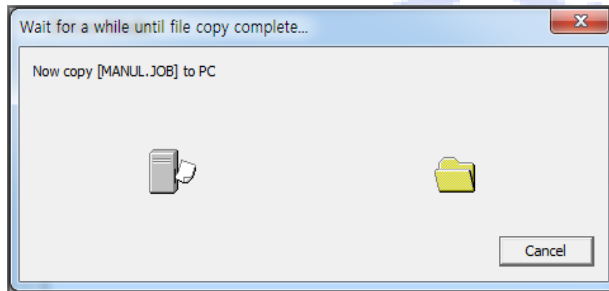
Run 'Job Editor' File Transfer



- Click [Confirm] button.

Step 4

Confirm 'Job Editor' File Transfer



- When the pop-up window gets activated to advise of the in-progress transfer before completing the transfer, OK message comes out on the 'Trace' window.

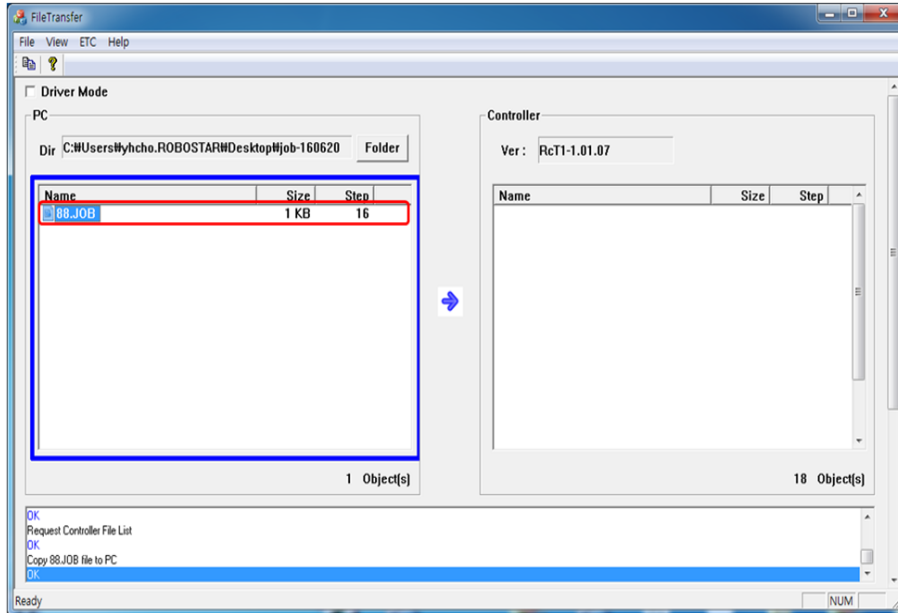
- The transferred 'Job Editor' file can be confirmed on the Controller 'File list' window.

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## 1.8.2 How to Export a 'Job Editor' File (2)

### Step 1

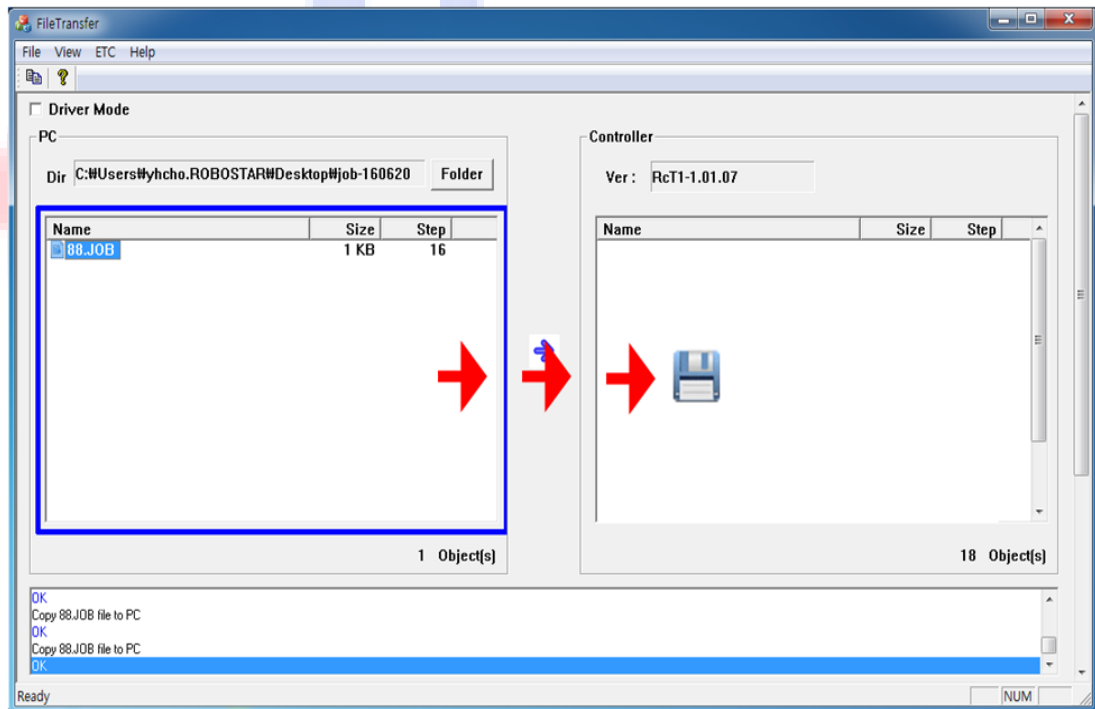
Select 'Job Editor' File on PC



- While pressing [Shift] key, select a PC's 'Job Editor' file to export.

### Step 2

'Job Editor' File Transfer

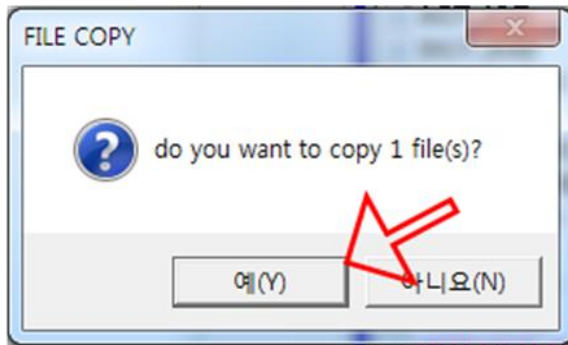


- Click the select menu [File] in the top-right corner of 'File Transfer' and select [Transfer]

menu.

Step 3

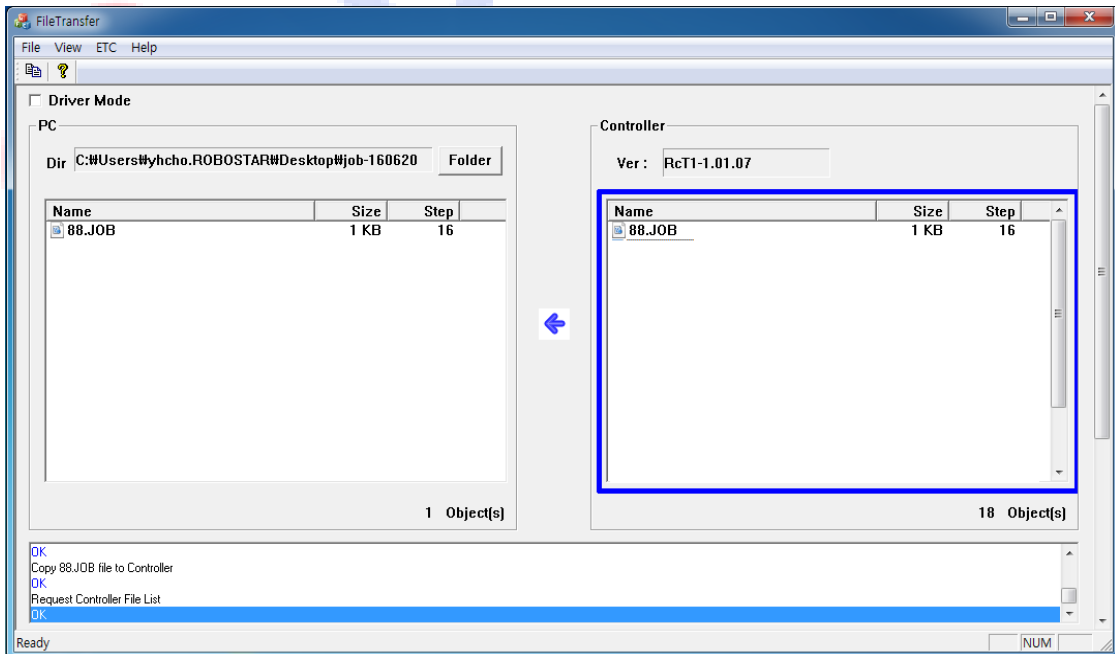
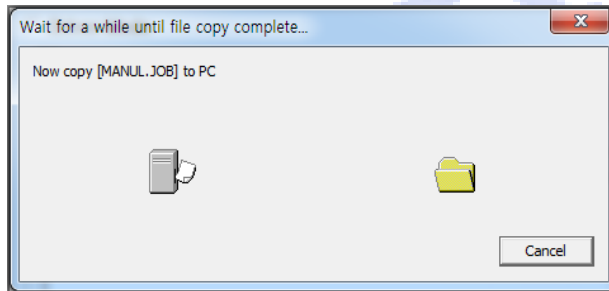
Run 'Job Editor' File Transfer



- Click [Confirm] button.

Step 4

Confirm 'Job Editor' File Transfer



- When the pop-up window gets activated to advise of the in-progress transfer before completing the transfer, OK message comes out on the 'Trace' window

- The transferred 'Job Editor' file can be confirmed on the Controller 'File list' window.

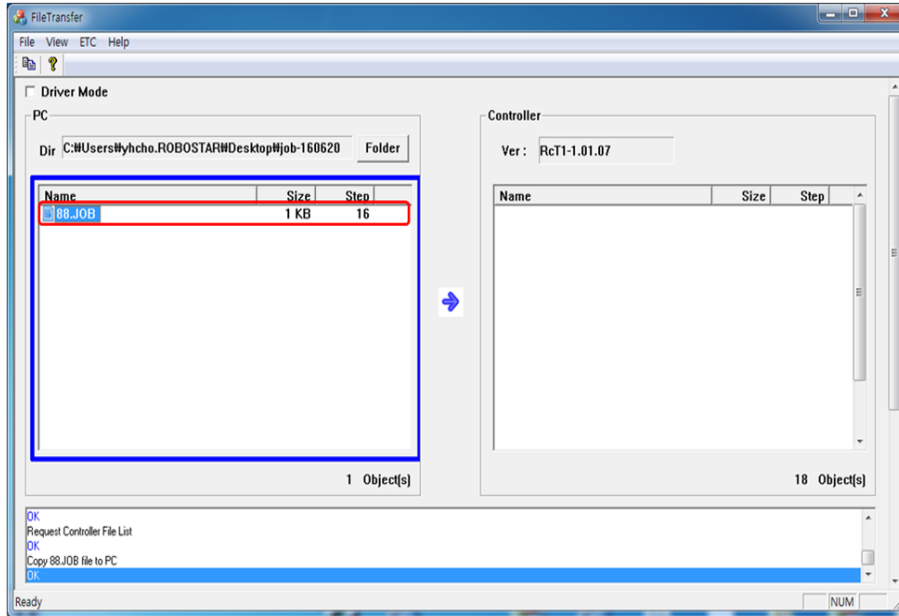
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### 1.9 Delete a 'Job Editor' File

- Used to delete a Job Editor' file.

#### Step 1

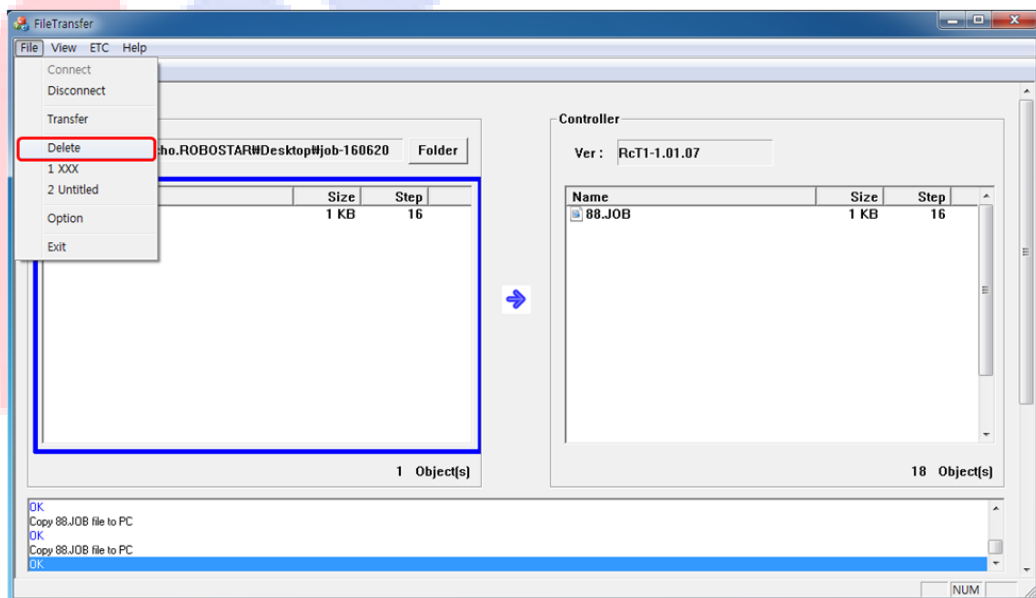
#### Select a Job Editor' File to Delete



- While pressing [Shift] key, select a PC's or Controller's 'Job Editor' file to delete.

#### Step 2

#### Select 'Job Editor' File Delete Menu

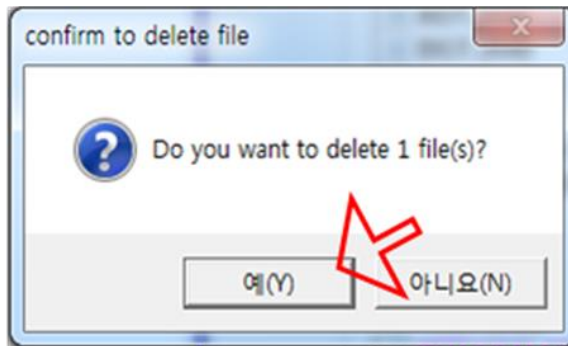


- Click the select menu [File] in the top-right corner of 'File Transfer' and select [Delete] menu.



Step 3

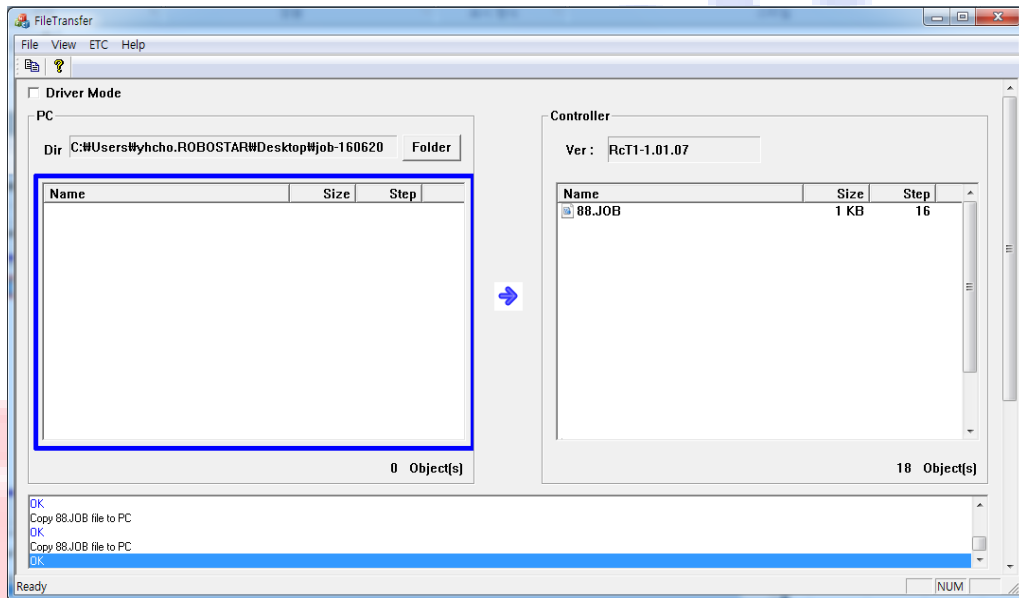
Run 'Job Editor' File Deletion



- Click [Confirm] button.

Step 4

Confirm 'Job Editor' File Deletion



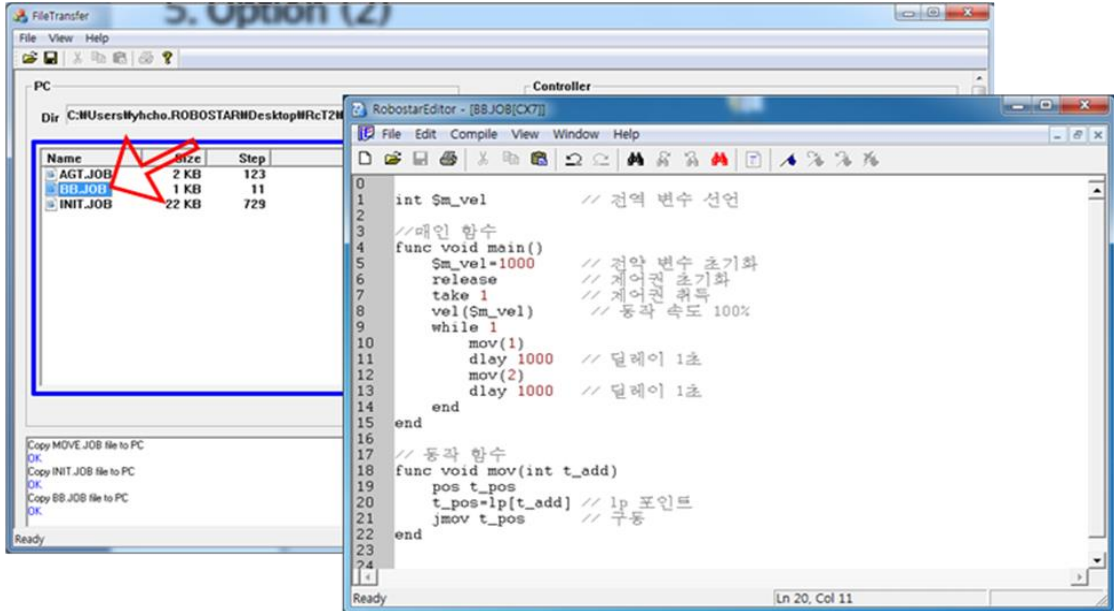
- The deleted 'Job Editor' file disappears from a PC's or Controller's 'File list' window.

### 1.10 Edit a 'Job Editor' File

- Used to edit Job Editor' file content.

Step 1

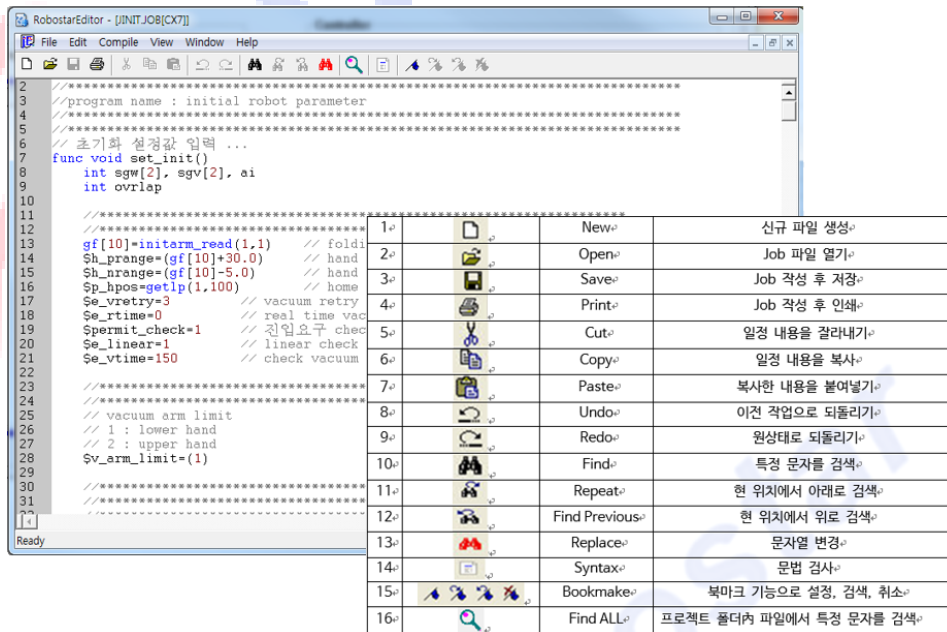
Select Job Editor File to Edit



- Select a 'Job Editor' file to edit and quickly click the right mouse button twice.
- As shown in the figure, a Robostar Editor window gets activated.

Step 2

















Describe 'Job Editor' Content and Icon



- Refers to a Job Editor screen, enabling Job file to be created and edited. In addition, a self Compiler is built in which enables the user to confirm whether Syntax has an error or now after

completing the Job.

• **Icon Description**

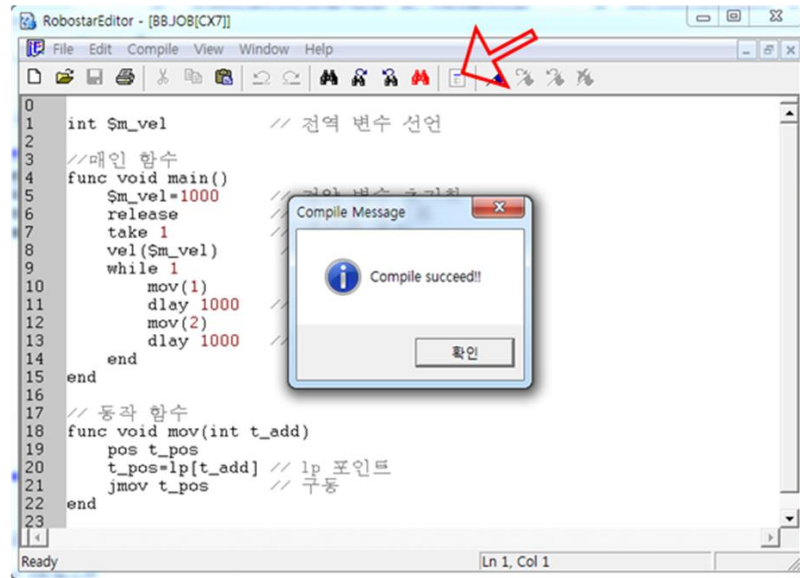
1		New	Create new file
2		Open	Open the Job file
3		Save	Create and save job
4		Print	Print after job creation
5		Cut	Cut schedule contents
6		Copy	Copy schedule contents
7		Paste	wrapped information in underwriting
8		Undo	Undo
9		Redo	Revert to previous action
10		Find	Search for specific characters
11		Repeat	Search down from current location
12		Find Previous	Search up from current position
13		Replace	Change string
14		Syntax	Grammar check
15		Bookmake	Set, search, cancel with bookmark function
16		Find ALL	Search for a specific character in a file in the project folder

### 1.11 Check 'Job Editor' Edits for error (Compile)

- Used to check edits for error.

Step 1

Edits Compile



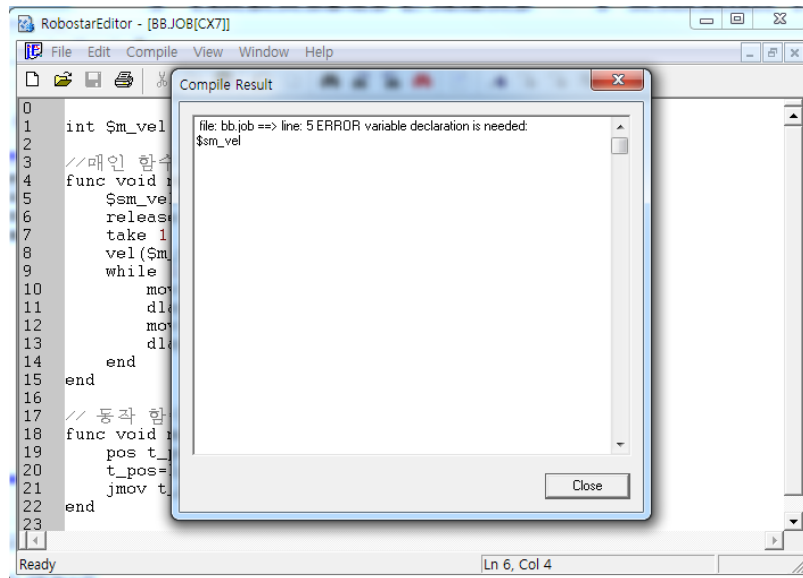
- Enables implementing the Compile through the “F5” button or ‘Grammar Check’ icon after completing the writing of a JOB file. When the Compile is successful, a pop-up window “Compile succeed!” comes up as shown in the figure.

### 1.11.1 Fail Edits Compile

- Occurs when the edited content does not match 'Job Editor' grammar.

Step 1

#### Compile Fail



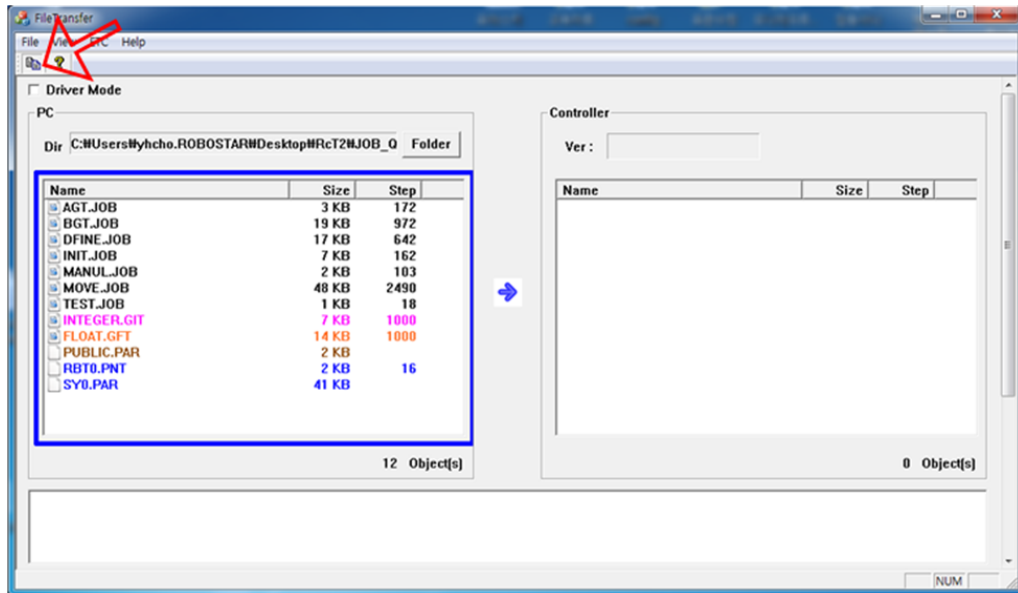
- When Compile fails, an Error Message output window displays Error Number, Job Total Line and Compiler Type information.

### 1.12 Renew a 'Job Editor' File

- Used when contents are modified or when a 'Job Editor' file is created directly in the folder.

#### Step 1

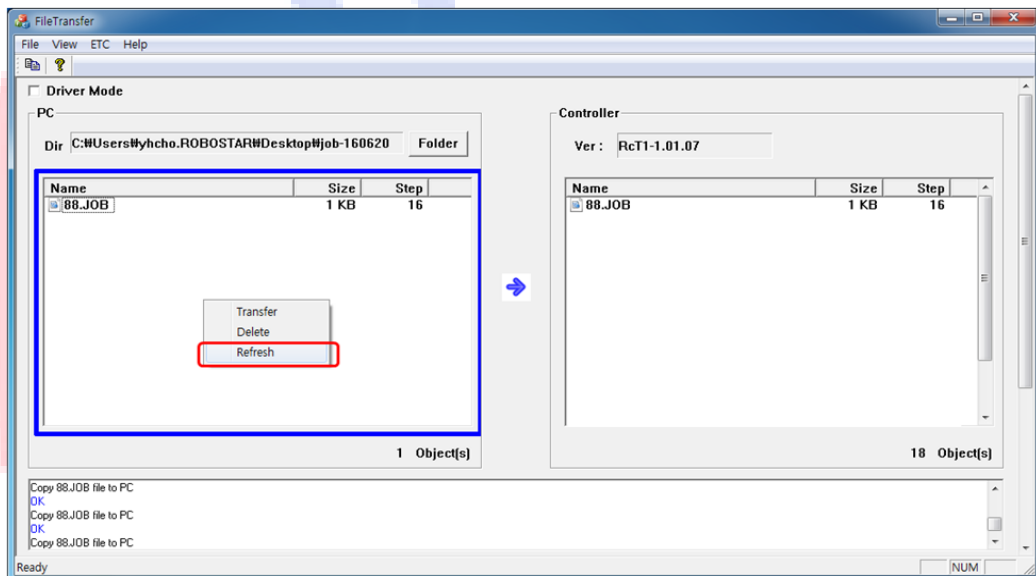
#### Renew icon



- Enables renewing through the icon 'Renew'.

#### Step 2

#### Renew Menu Selection



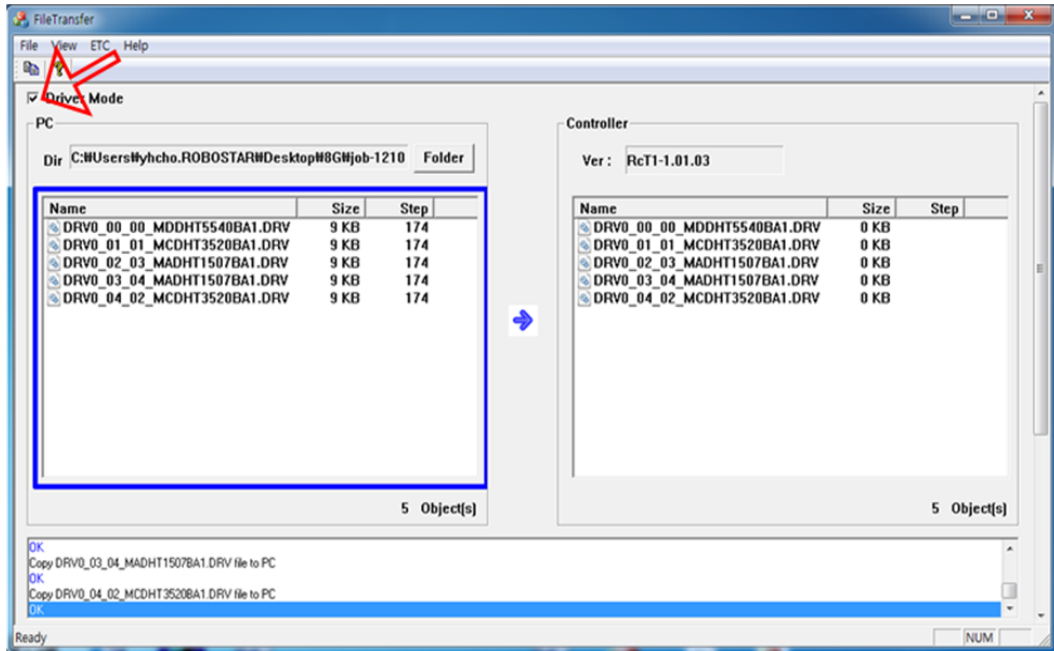
- Click the right mouse button and the menu window gets activated and when selecting 'Refresh', it is renewed.

### 1.13 Driver mode

- Enables Servo Driver file [Fetch, export, edit].

#### Step 1

#### Servo Driver



- Select [Drive mode] in the top-left corner of File Transfer and 'Servo driver' file is shown.
- How to use is same as 'Job Editor'.

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RCQ ROBOT CONTROLLER (Modified)

CONTROLLER MANUAL

FIRST EDITION SEPTEMBER 2015

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