Robostar Robot Controller Manual

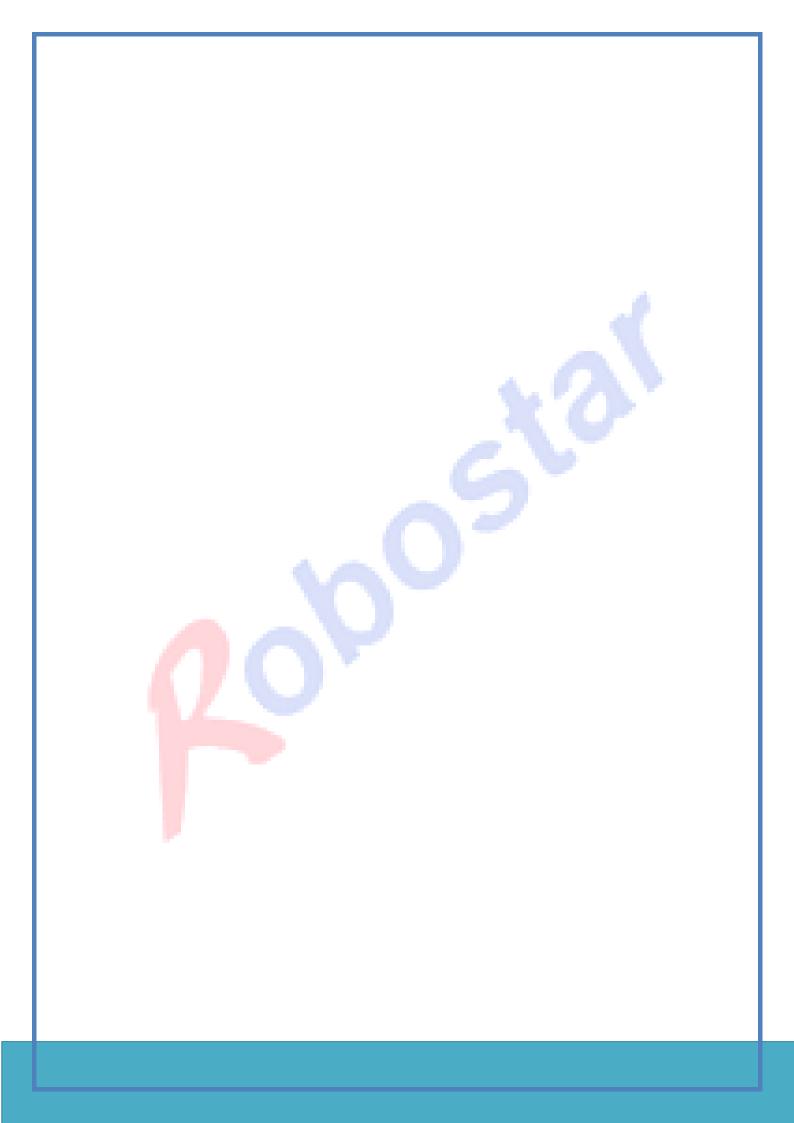
# **Robostar Robot Controller**

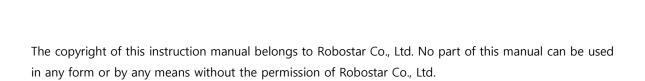
# Controller Series-IRC UNIHOST Manual

- Controller Manual
- Operation Manual
- □ Programming Manual
- Vinihost Manual
- Simple OperationManual

Robostar Robot Controller Manual







Specifications are subject to change without prior notice.

# **Product Warranty**

Robostar products are manufactured under strict quality control and all Robostar products are warranted for one year from date of manufacture. During the warranty period, free services shall be provided only for: mechanical failure due to the negligence of Robostar, or failure caused by designs and in the manufacturing process during normal operation,

Free services are not provided in the following cases

- (1) After the warranty period expires.
- (2) Failure caused by inappropriate repairs, alterations, and shifting that are instructed by your enterprise or the third party, as well as other mishandling failure.
- (3) Failure due to the use of unauthorized products, including parts and grease.
- (4) Failure due to incidents involving fire, disasters, earthquakes, damage from storm and flood, and other force majeure events.
- (5) Failure caused by the use of products outside the environment specified in our product specifications, such as in excretion and flooding.
- (6) Wear-out failures for consumables.
- (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.

#### Address and Contact Details for Robostar Co., Ltd

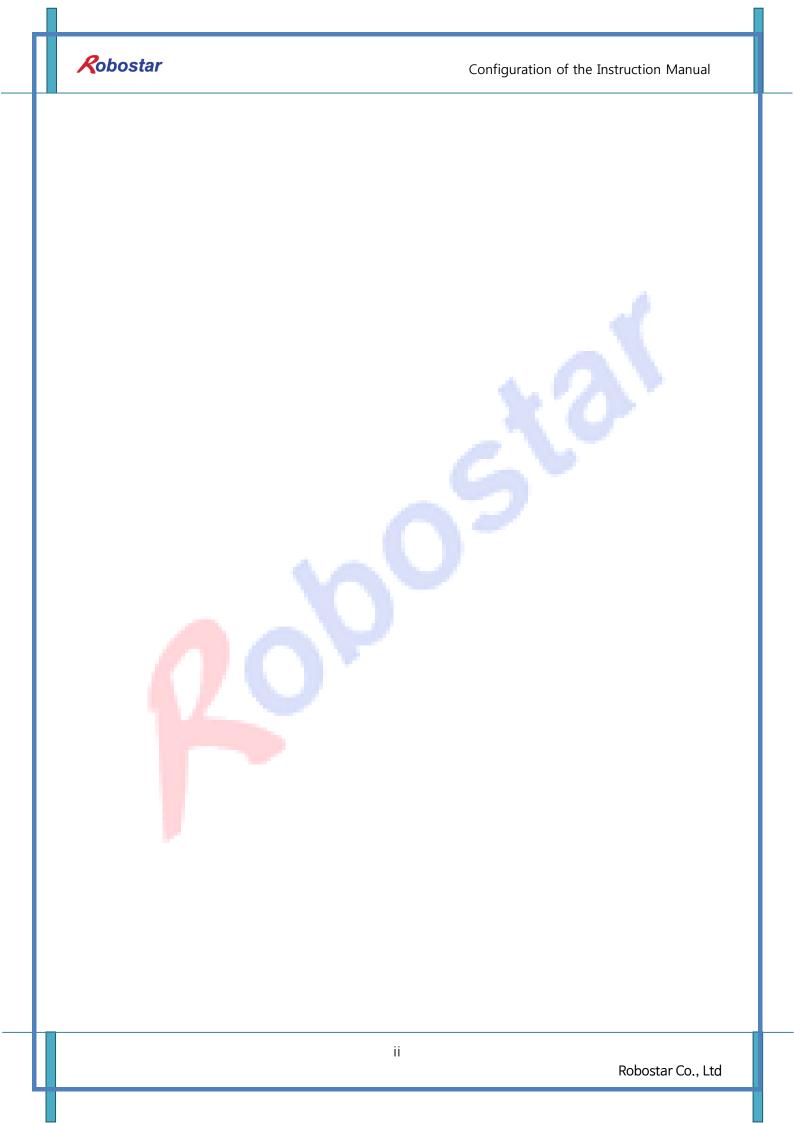
 Head Office and Facility 119-38, Sasa-dong, Sangnok-gu, Ansan-City, Gyeonggi-do, Republic of South Korea (426-220)

- Service Request and Product Enquiries

   Sales Enquiries
   TEL. 031-400-3600
   FAX. 031-419-4249
   Customer Enquiries
   TEL. 1588-4428
- Second Facility (1<sup>st</sup> Floor, Lot 3, Block 4, Suwon Hi-tech Industrial Complex)
   960, Gosaek-dong, Gwonseon-gu, Suwon-City, Gyeonggi-do, Republic of South Korea (441-813)

Robostar

www.robostar.co.kr



# **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'.

Contents

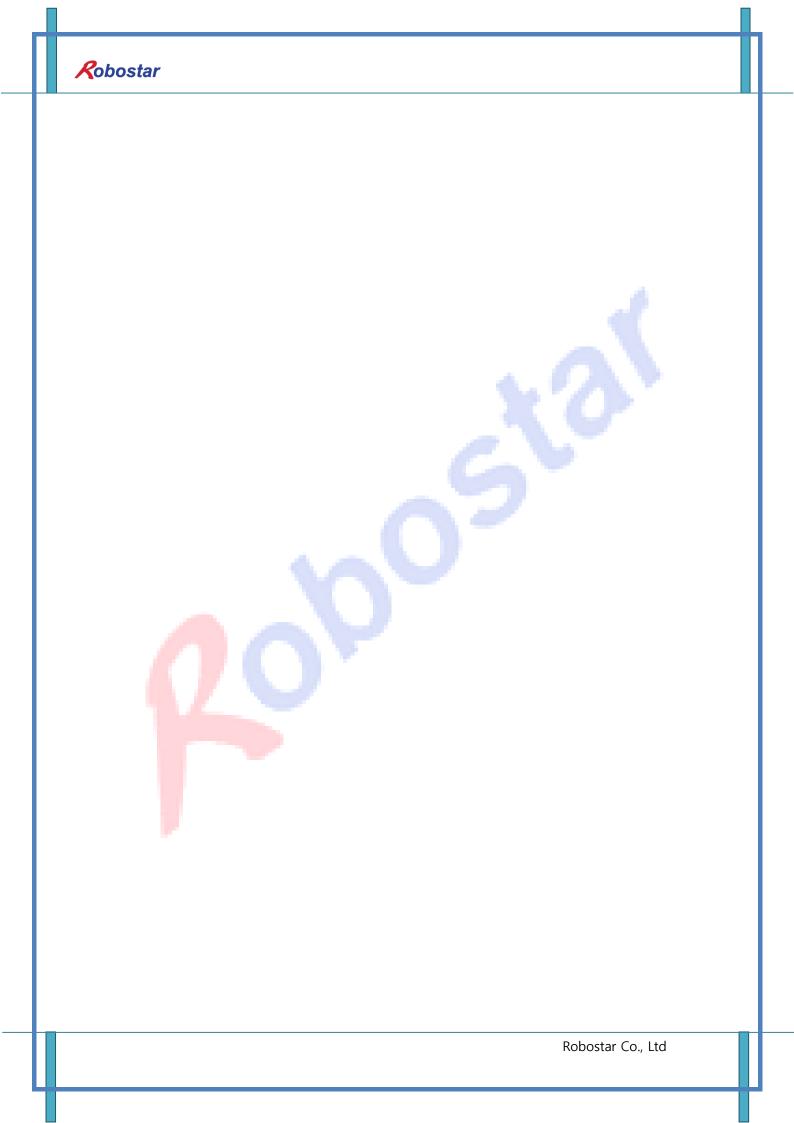
# Contents

CH.1	HOW TO USE A FILE TRANSFER	1
1.1	Open a File Transfer	3
1.2	DESCRIPTION OF A FILE TRANSFER	4
1.3	CREATE AND OPEN A PROJECT	5
1.3.	.1 Create a Project Folder	5
1.3.	.2 Open a Project	6
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	13
1.7.		
1.7.		
1.8	EXPORT A 'JOB EDITOR' FILE	
1.8.	1 How to Export a 'Job Editor' File (1)	18
1.8.		
1.9	DELETE A 'JOB EDITOR' FILE	
1.10	EDIT A 'JOB EDITOR' FILE	26
1.11	CHECK 'JOB EDITOR' EDITS FOR ERROR (COMPILE)	28
1.1	1.1 Fail Edits Compile	29
1.12	RENEW A 'JOB EDITOR' FILE	30
1.13	DRIVER MODE	31

# 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

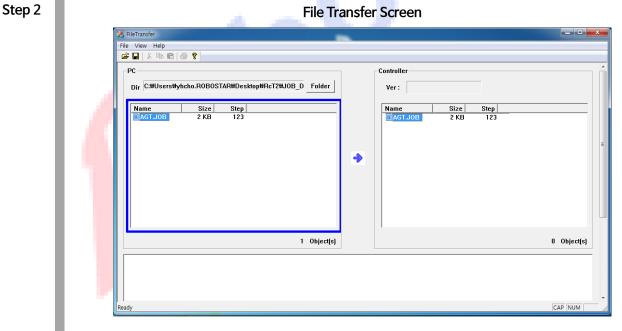


#### 1.1 Open a File Transfer

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



• (a) : Click the 'File Transfer' icon.

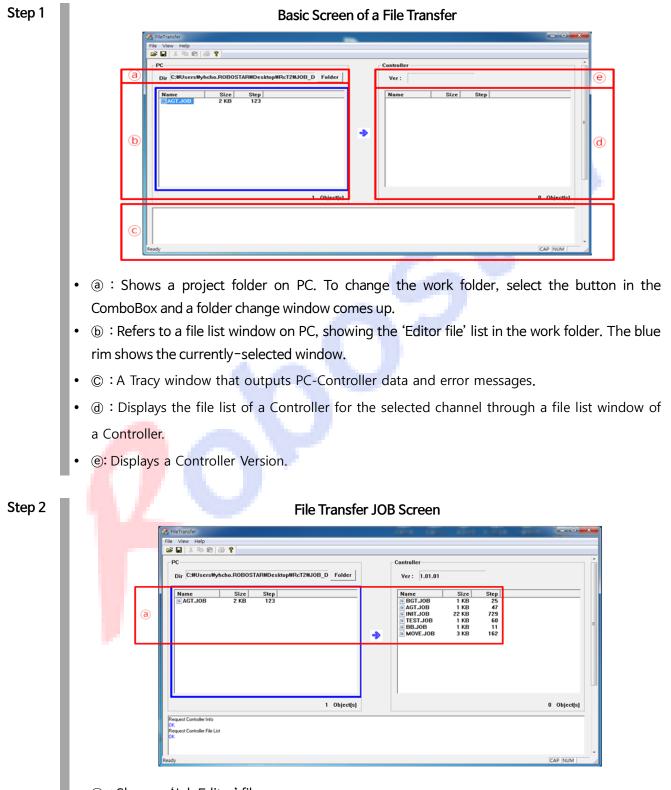


- Once successful, a 'File Transfer Edit' screen comes up.
- The 'File Transfer' enables easily transmitting and receiving files and parameters between the robot controller and the computer.

\_

#### 1.2 Description of a File Transfer

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



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

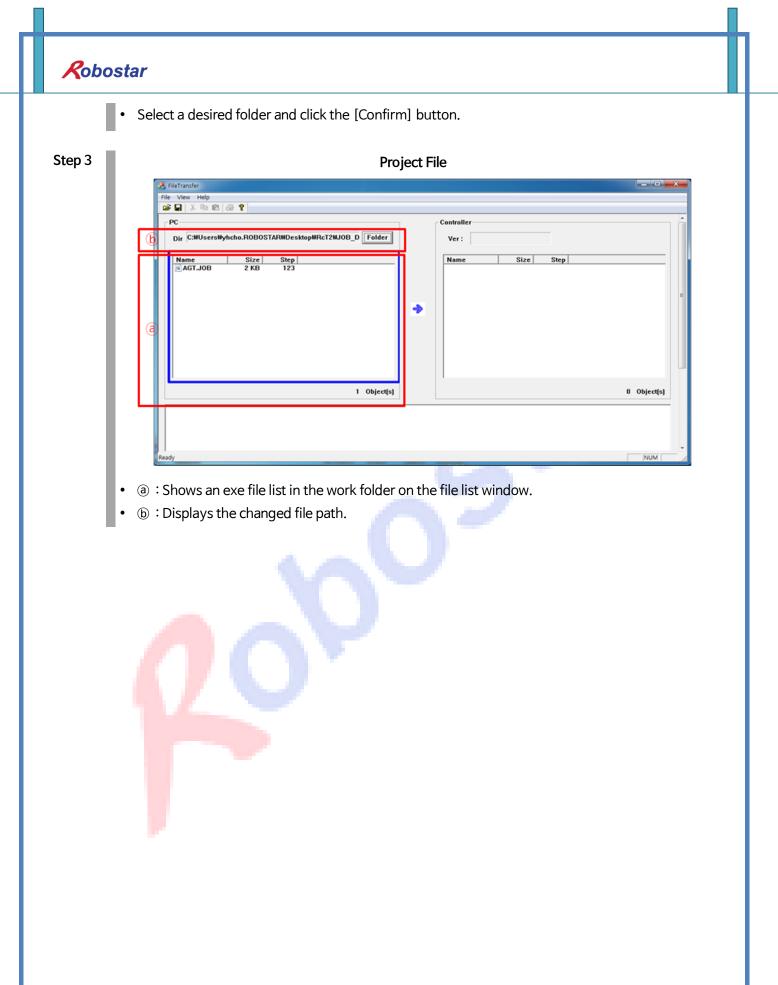


- Click the right mouse button on the desktop.
- Select [New Folder] from the list.
- When a new folder is created, change the folder name.

# 1.3.2 Open a Project

- Fetch a project file.

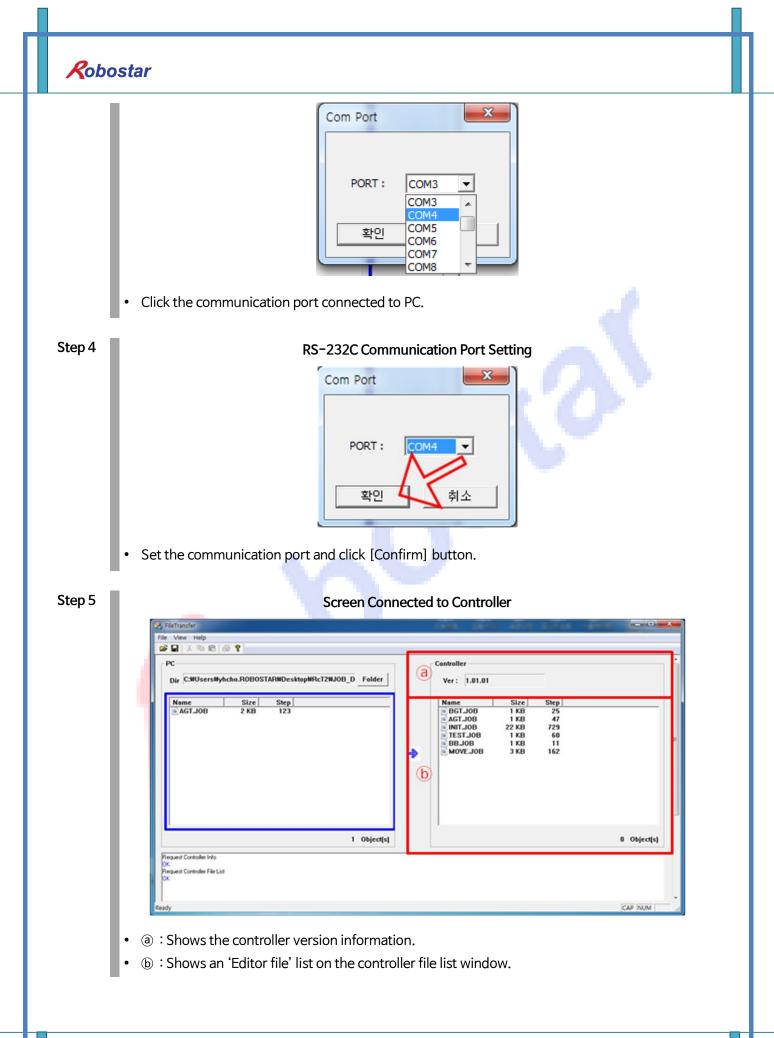
Step 1	Open a Project File
	🛃 FileTransfer
	File View Help
	PC Controller Dir C:NUsersNyhcho.ROBOSTARNDesktopWRcT2 Folde Ver:
	Dir C:HUsersHyhcho.ROBOSTARHDesktopHRcT2 Folde Ver:
	Name Size Step
	[개북 압응]
	•
	0 Object(s) 0 Object(s)
	Ready
	. Click the [Faller] houteness and at a set of the second film of the last
	Click the [Folder] button to activate an exe file open dialog box.
_	
Step 2	Open a Project File
	A FileTransfer
	File View Help
	# ■   X № 他   # *
	PC Controller
	Dir C:#UsersHyhcho.ROBOSTARHDesktopHRcT2HJOB_D Folder Ver :
	Name Size Step 물덕 찾아보기 프로 Step
	AGT.JOB 2 KB 123 Select a directory:
	▲ 論 好容 約四 ~ ↓ ▲ 編 RcT2 ■
	▶ 🤐 Interpreter_2101 사용설명서 ▶ 🕌 JOB_cclink
	JOB_DEMO     JDB_00     JDB_00
	▶ <u>La</u> JOB_Test ▲ 시험학육생품
	● (673) ● 10 RcT2 - 明从臣 人
	확인 취소 0 Object(s)
	Ready



#### 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
	FileTransfer
	Connect Disconnect
	Transfer Controller Ver :
	2 Untitled Size Step Name Size Step
	Option Exit E
	•
	0 Object(s) 0 Object(s)
	• Click a Select Menu [File] on the top-right corner of 'File Transfer', then select [Connect]
	menu.
Step 2	RS-232C Communication Option Setting
	Com Port 💌
	PORT : COM3
	확인 취소
	Click the PORT setting button.
Step 3	RS-232C Communication Port Setting
	Robostar Co., Ltd



#### 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	
	🔏 FileTransfer	- 0 ×
	File     View     ETC     Help       Connect     Disconnect     Image: Controller       Transfer     Image: Controller     Image: Controller       Delete     ho.ROBOSTAR#Desktop#job-160620     Folder       XXX     Z Untitled     Size       Size     Step     Name	2 <b>p</b>
_	0 Object(s) 18 Request Controller Info	Object(s)

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

	🧏 FileTransfer	canal base	at many sugar of	
	File View Help			
	₩ ₩ X % 18 /8 1			
- 1	PC	(a) Controller		
	Dir C:NUsersNyhcho.ROBOSTARNDesktopNRcT2NJOB_D Folder	Ver:		
	AGT_JOB 2 KB 123	Name	Size Step	
_				
_				
_				
		b		
		Ь		
		р		
		ю		
		Ф		
		ю		
	1 Object(s)	Э		0 Object(s)
	1 Object(s)	б		0 Object(s)
	Bequest Controller Info	<b>b</b>		0 Object(s)
	Request Controller Into OK. Request Controller File List	<b>b</b>		0 Object(s)
	Request Controller Info DK	<b>b</b>		0 Object(s)
	Request Controller Into OK. Request Controller File List	б		0 Object(s)

- (a) : 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
	🔏 FileTransfer
	File View ETC Help
	Disconnect
	Transfer Controller
	Delete     ho.ROBOSTAR#Desktop#job-160620     Folder     Ver:     RcT1-1.01.07       1 XXX
	2 Untitled     Size     Step       Oction     88.JOB     1 KB
	Edit
	→
	0 Object(s) 18 Object(s)
	Request Controller Info DK Request Controller File List
	• Click the select menu [File] in the top-right corner of 'File Transfer' and select [Option] menu.
Step 2	Activate Configuration Dialog Window
•	
	Option
	Communication
	Time Out : 5 💌 Retry Count : 3 💌
	Path
	Excute Path : C:WUsersWyhcho.ROBOSTARWDesktop
	OK Cancel
	• Configuration dialog window comes up. Press [Path] dialog window button to assign a path.
Step 3	Search Path
	· /

Robostar
Iteransfer
물더 찾아보기 Select a directory: 이 유 CT2 목사본 이 R CT2 목사본 이 Uninost_Project 이 교육자료 이 리눅스_FW 이 모니터프로그램 이 사율레이타 이 감독사니 이 지 애뉴얼 이 제 여기 매뉴얼
• (a) 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         Warning       Can NOT Find RobostarEditor         Image: Can NOT Find RobostarEditor       Image: Can NOT Find RobostarEditor         Image: Can NOT Find RobostarEditor       Image: Can NOT Find RobostarEditor         Image: Can NOT Find RobostarEditor       Image: Can NOT Find RobostarEditor         Image: Can NOT Find RobostarEditor       Image: Can NOT Find RobostarEditor         Image: Can NOT Find RobostarEditor       Image: Can NOT Find RobostarEditor         Image: Can NOT Find RobostarEditor       Image: Can NOT Find RobostarEditor         Image: Can NOT Find RobostarEditor       Image: Can NOT Find RobostarEditor         Image: Can NOT Find RobostarEditor       Image: Can NOT Find RobostarEditor         Image: Can NOT Find RobostarEditor       Image: Can NOT Find RobostarEditor         Image: Can NOT Find RobostarEditor       Image: Can NOT Find RobostarEditor         Image: Can NOT Find RobostarEditor       Image: Can NOT Find RobostarEditor         Image: Can NOT Find RobostarEditor       Image: Can NOT Find RobostarEditor         Image: Can NOT Find RobostarEditor       Image: Can NOT Find RobostarEditor         Image: Can NOT Find RobostarEditor       Image: Can NOT Find RobostarEditor         Image: Can NOT Find RobostarEditor       Image: Can NOT Find RobostarEditor         Image: Can NOT Find RobostarEditor       Image: Can NOT Find R
Robostar Co., Ltd

### 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.

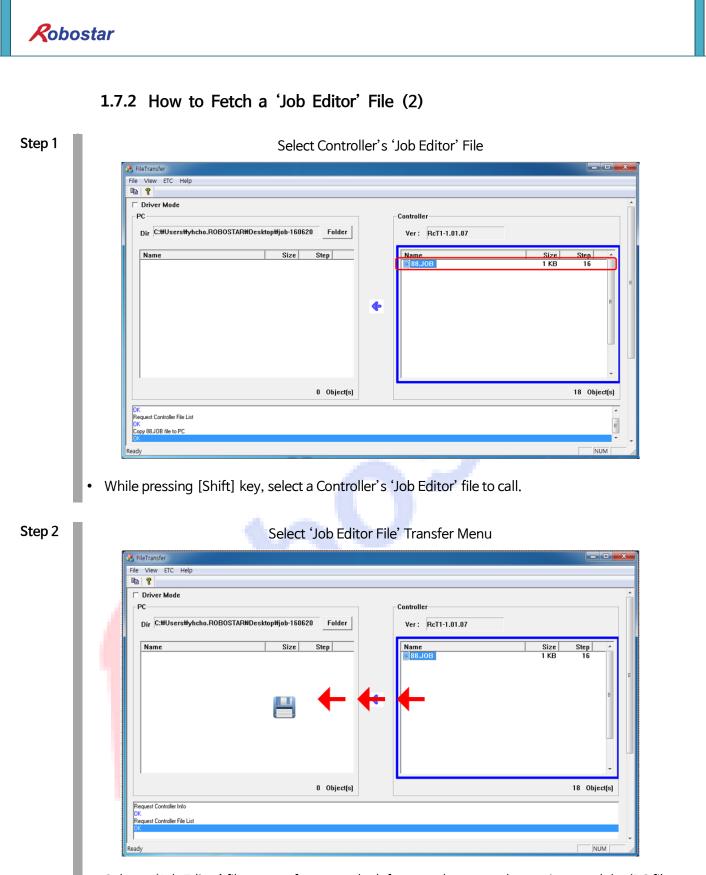
### 1.7.1 How to Fetch a 'Job Editor' File (1)

Step 1		Select Controller's 'Job Editor' File	
		🔏 FileTransfer	X-
		File View ETC Help	
		□ Driver Mode	
		PC Controller	
		Dir C:#Users#yhcho.ROBOSTAR#Desktop#job-160620 Folder Ver: RcT1-1.01.07	
	- I	Name Size Step	Sten
		<b>1 KB</b>	16
			=
			-
		0 Object(s)	18 Object(s)
		OK Request Controller File List	
		Copy 88.JOB file to PC	E
		OK	· ·
		Ready	NUM //
	<ul> <li>Whi</li> </ul>	ile pressing [Shift] key, select a Controller's 'Job Editor' file to fetch.	
Step 2		Select 'Job Editor' File Transfer Menu	
		A FileTransfer	
		File View ETC Help Connect	
		Disconnect	<u>^</u>
		Transfer	
		Delete ho.ROBOSTAR#Desktop#job-160620 Folder Ver: RcT1-1.01.07	
		1 XXX 2 Untitled Size Step Name Size	Step
		Option Option IKB	16
		Exit	=
			E
			-
		0 Object(s)	8 Object(s)
		OK Request Controller File List	<u>^</u>
		OK Copy 88,JOB file to PC	E
			· ·
			NUM
	Clic	k the select menu [File] in the top-right corner of 'File Transfer' and	select [Transfer]

Robostar	
mer	nu.
Step 3	Run 'Job Editor' File Transfer
Clic     Step 4	ck [Confirm] button. Confirm 'Job Editor' File Transfer
	Wait for a while until file copy complete         Now copy [MANUL.JOB] to PC         Image: Cancel
	View ETC Help
PC	Name       Size       Step         0       88.JOB       1 KB       16         Name       Size       Step         0       1 KB       16         Name       Size       Step         0       88.JOB       1 KB       16         Name       Size       Step         0       88.JOB       1 KB       16         0       BGT.JOB       20 KB       1024         0       DFINE.JOB       7 KB       165         0       JSYNC.JOB       1 KB       25         0       MANUL.JOB       2 KB       60         0       SHI.JOB       1 KB       28
	1         Object(s)           1         Object(s)
Copy OK	88JOB file to PC

• 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.



• 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'.

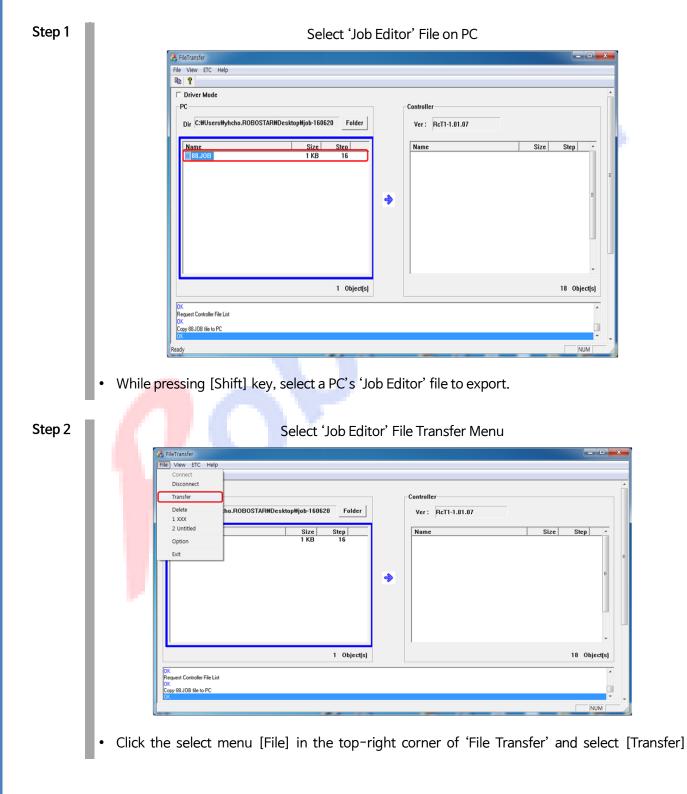
Robo	star
Step 3	Run 'Job Editor' File Transfer
Step 4	Click [Confirm] button.     Confirm 'Job Editor' File Transfer     Wait for a while until file copy complete     Now copy [MANUL.JOB] to PC
	Cancel
	File View ETC Help         Dir C:#Users#yhcho.R0B0STAR#Desktop#job-160620       Folder         Ver:       RcT1-1.01.07         Name       Size       Step                88.J0B             1 KB             16               88.J0B             1 KB             16             88.J0B             1 KB             16             88.J0B             1 KB             16             88.J0B             1 KB             16             88.J0B             1 KB             16             88.J0B             1 KB             16             88.J0B             1 KB             16             AGT.J0B             3 KB             172             BGT.J0B             7 KB             645             SIJSYNC.J0B             1 KB             26 KB             1024             SJSYNC.J0B             1 KB             25             MANUL.J0B             2 KB             60             MOVE.J0B             54 KB             2843             SH1.J0B             1 KB             28             SH1.J0B             1 KB             1
	I         Object(s)           OK         18           Copy 88,JOB file to PC         1           K         Copy 88,JOB file to PC
	<ul> <li>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</li> </ul>

• 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)



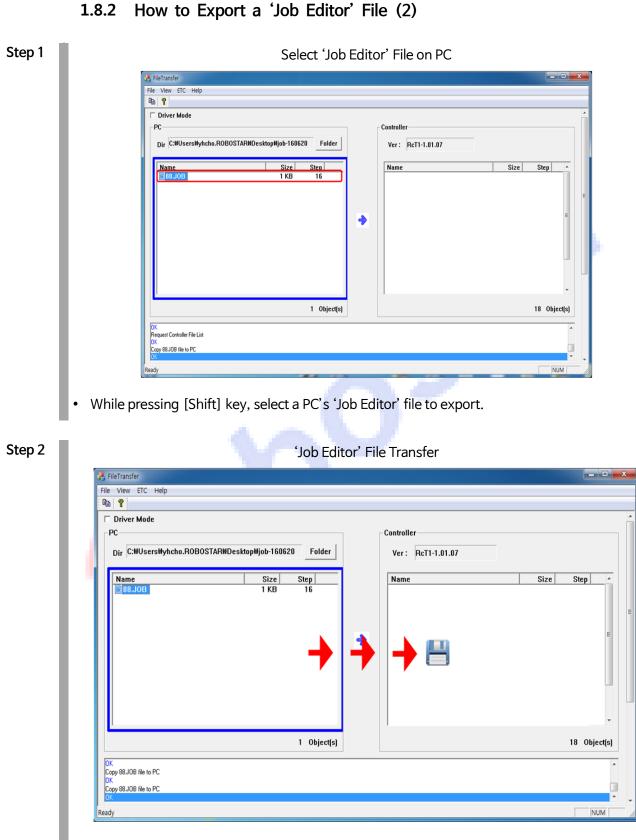
Robostar	
menu.	
Step 3	Run 'Job Editor' File Transfer
Click [     Step 4	Confirm] button. Confirm 'Job Editor' File Transfer
FileTransfe	
Name BB.J	Made Users₩yhcho.ROBOSTAR₩Desktop₩job-160620 Folder DB 1 KB 16 Controller Ver: RcT1-1.01.07 Name Size Step ↓ BBJOB 1 KB 16 BBJOB 1 KB
Ready	

• 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.

1.8.2



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

Robo	star
	menu.
tep 3	Run 'Job Editor' File Transfer
- 1	FILE COPY
- 1	
- 1	do you want to copy 1 file(s)?
- 1	
- 1	에(Y) 나요(N)
- 1	Click [Confirm] button.
- 1	
tep 4	Confirm 'Job Editor' File Transfer
- 1	Wait for a while until file copy complete
- 1	
- 1	
- 1	Cancel
- 1	
- 1	FileTransfer       File View ETC Help       Ban ?
- 1	Controller
- 1	Dir     C:#Users#yhcho.ROBOSTAR#Desktop#job-160620     Folder     Ver:     RcT1-1.01.07       Name     Size     Step     A
- 1	Walle         3/22         <
- 1	€
- 1	
- 1	
	1 Object(s)
	OK Copy 88.JOB file to Controller OK Request Controller File List
	DK     •       Ready     NUM

• 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.

## 1.9 Delete a 'Job Editor' File

- Used to delete a Job Editor' file.

Step I	Select a Job Editor' File to Delete	
	🔏 FileTransfer	
	File View ETC Help	
	Controller	
	Dir C:#Users#yhcho.ROBOSTAR#Desktop#job-160620 Folder Ver: RcTi-1.01.07	
	Name Size Step	
	1 KB 16	
	E	
	<b>→</b>	
	1 Object(s) 18 Object(s)	
	DK A	
	Request Controller File List 0K Coxp 88.UBB file to PC	
	Ready	
	• While pressing [Shift] key, select a PC's or Controller's 'Job Editor' file to delete.	
1		
Step 2	Select 'Job Editor' File Delete Menu	
	ReleTransfer	

FileTransfer						
Connect Disconnect						
Transfer			Co	ntroller		
Delete	ho.ROBOSTAR#Desktop#job-160620	Folder	,	Ver: RcT1-1.01.07		
1 XXX						
2 Untitled	Size	Step	1	Name	Size	Step
Option	1 KB	16		88.JOB	1 KB	16
Exit						
			<b>&gt;</b>			
		1 Object(s)				18 Objec
opy 88.JOB file to PC						
K						NU

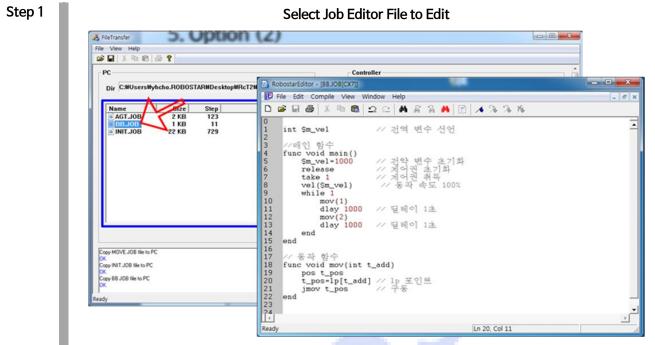
• Click the select menu [File] in the top-right corner of 'File Transfer' and select [Delete] menu.

Step 3 Run 'Job Editor' File Deletion
confirm to delete file
Do you want to delete 1 file(s)?
예(Y) 아니요(N)
Click [Confirm] button.
Step 4 Confirm 'Job Editor' File Deletion
FileTransfer     File View ETC Help
Pable     ?       □ Driver Mode     ^
PC     Controller       Dir     C:#Users#yhcho.ROBOSTAR#Desktop#job-160620     Folder     Ver :     RcT1-1.01.07
Name     Size     Step       1     88.J0B     1
0 Object(s) 18 Object(s)
Copy 98.JOB file to PC OK Copy 98.JOB file to PC DK
Ready
• The deleted 'Job Editor' file disappears from a PC's or Controller's 'File list' window.

Step 2

#### 1.10 Edit a 'Job Editor' File

- Used to edit Job Editor' file content.



- 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.

#### Describe 'Job Editor' Content and Icon - 0 **X** RobostarEditor - [JINIT.JOB[CX7]] File Edit Compile View Window Help D ☞ B ⊕ | ୬ ☜ ₪ | 요요| ♠ ೫ ೫ ♠ | Q, | E | ▲ ೫ ೫ № 2 -4 5 6 7 8 9 10 11 12 13 4 15 16 7 8 9 10 11 12 13 4 15 16 17 18 9 20 21 22 23 4 25 6 27 8 9 30 11 //\*\*기화 설정값 입력 ... func void set\_init() int sgw[2], sgv[2], ai int ovrlap 0]=initarm\_read(1,1) // foldi range-(gf[10]=30.0) // hand range-(gf[10]=5.0) // hand posgetlp(1,100) // hand posgetlp(1,100) // home retry=3 // veal time vac mit\_check=1 // 감임요구 chec intear=1 // linear check time=150 // check vacuum New₽ 신규 파일 생성. 14 2₽ Job 파일 열기↔ Open. Ê 3₽ Ē Job 작성 후 저장 Save 40 6 Print-Job 작성 후 인쇄+ 50 Cute 일정 내용을 잘라내기. 60 -Copy 일정 내용을 복사 //\*\*\*\*\*\* 7.0 ĉ Paste-복사한 내용을 붙여넣기. 80 이전 작업으로 되돌리기# Undo. // vacuum arm limit // 1 : lower hand // 2 : upper hand \$v\_arm\_limit=(1) $\Omega$ 원상태로 되돌리기∂ 9.0 0 Redo-10e Find₽ 특정 문자를 검색? 44 114 ñ Repeat. 현 위치에서 아래로 검색 124 Find Previous 현 위치에서 위로 검색 ъ Ready 134 44 Replace₽ 문자열 변경 140 Syntax 문법 검사? 15 1 76 76 76 Bookmake<sub>2</sub> 북마크 기능으로 설정, 검색, 취소 16 Q Find ALLe 프로젝트 폴더內 파일에서 특정 문자를 검색.

• 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	Щ,	Open	Open the Job file
3		Save	Create and save job
4		Print	Print after job creation
5	*	Cut	Cut schedule contents
6		Сору	Copy schedule contents
7	5	Paste	wrapped information in underwriting
8	C	Undo	Undo
9	12	Redo	Revert to previous action
10	44	Find	Search for specific characters
11	4	Repeat	Search down from current location
12	30	Find Previous	Search up from current position
13	44	Replace	Change string
14		Syntax	Grammar check
15	1334	Bookmake	Set, search, cancel with bookmark function
16	٩	Find ALL	Search for a specific character in a file in the project folder



Step 1

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

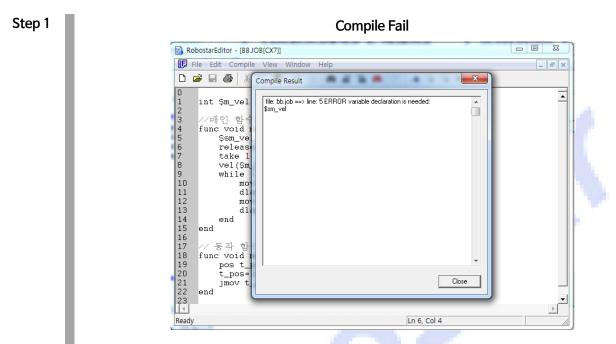
- Used to check edits for error.

Rol	bostarEditor - [BBJOB[CX7]]
F F	ile Edit Compile View Window Help
	≇ ⊟ ∰   % ™ ®   ⊇ ⊇   M A A A   E <mark>- →</mark> % % %
0 12 3 4 5 6 7 8 9 10 11 23 4 5 6 7 8 9 10 112 13 14 5 16 17 18 9 20 21 22 23	int \$m_vel // 전역 변수 선언 //대인 함수 func void main() Sm_vel=1000 release take 1 vel(\$m_vel) while 1 mov(1) dlay 1000 end end // 동작 함수 func void mov(int t_add) pos t_pos t_pos=lp[t_add] // lp 포인트 jmov t_pos
1	) ·

• 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

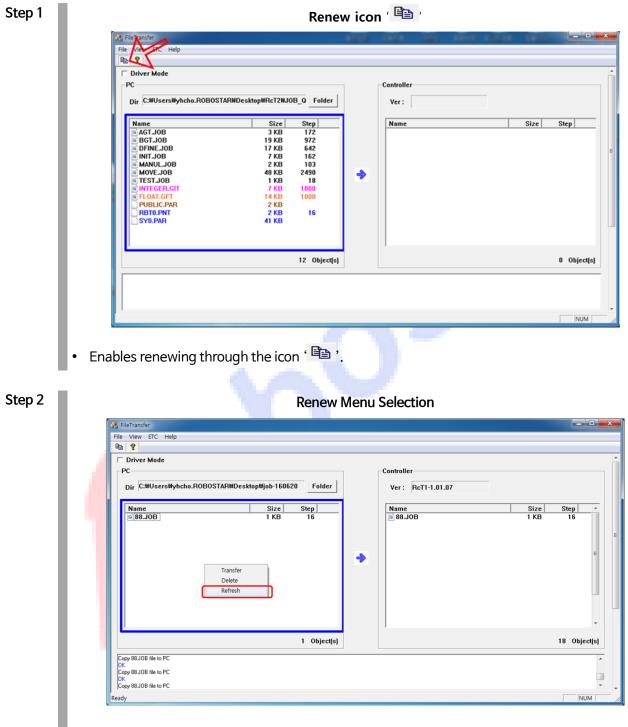
Occurs when the edited content does not match 'Job Editor' grammar.



• 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.

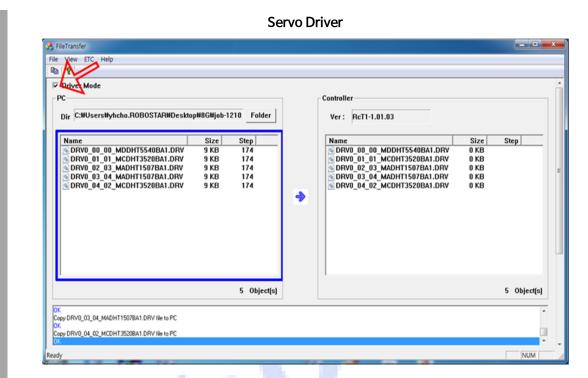


• Click the right mouse button and the menu window gets activated and when selecting 'Refresh', it is renewed.

Step 1

#### 1.13 Driver mode

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



- 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'.



RCQ ROBOT CONTROLLER (Modified)

CONTROLLER MANUAL FIRST EDITION SEPTEPBER 2015

> ROBOSTAR CO, LTD ROBOT R&D CENTER ROBOT R&D CENTER