



	<p><b>64 Series Console Dataset V3.00 or Higher Instruction Manual</b></p>	
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**Toyo Denki Seizo K.K.**

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## 1. Overview

The 64 Series Console Dataset software allows users to make the data settings for the Toyo Denki inverters VF/ED series (excluding VFC2004,ADS bord) on a PC. With the software, you can set all setting values at once, read data set in an inverter, and display and print the data.

Furthermore, you can store the data read from an inverter as backup just in case.

## 2. Operating Environment

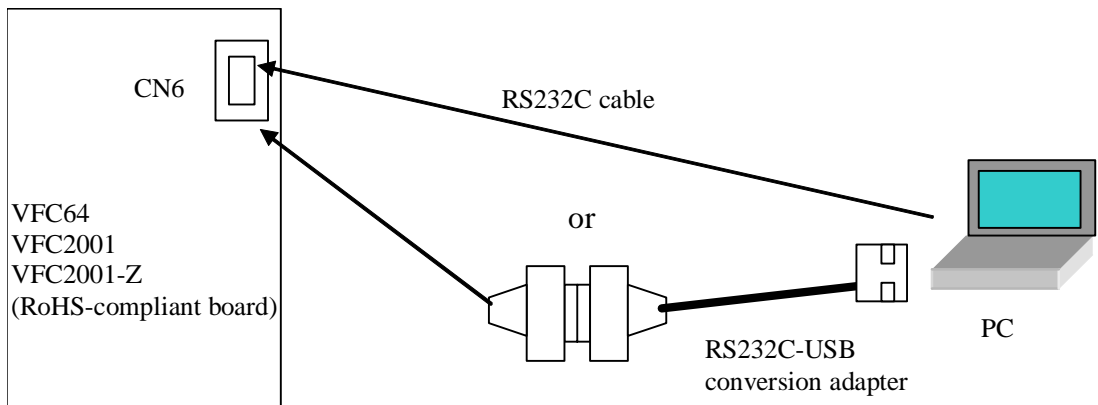
- Windows 95 or later
- Use of an RS 232C-USB conversion adapter is recommended

## 3. Changes between V2.70 or Earlier and V3.00

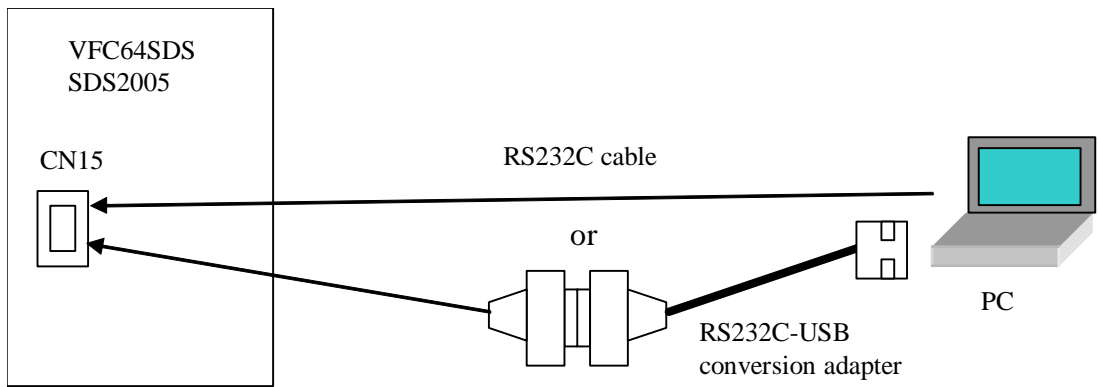
- Change of the ROM selection method  
With V2.70 or earlier, the pull-down menu was used to select a ROM version. From V3.00, it has been changed to the pop-up menu with enhanced usability.
- Newly added item  
The "Setting area" item has newly been added. This saves you from having to refer to the manual.
- Compare function  
The function compares the setting values in separate files and displays a "\*" (asterisk)" mark if the values are different.
- Check of the decimal point position and the number of significant figures  
Before a setting value is input, the function checks whether the decimal point position and the number of significant figures of the value are correct.
- Area designation for error messages  
When data is loaded into an inverter, out-of-range setting values are written in the communication log. L, N, and O area where the use frequency was a little were changed to selectivity.
- Area designation for printing  
You can specify the print range for each area.
- Display of the status bar  
If a setting value is changed, the changed "Area name" appears on the status bar.
- No need for opening a file  
When data is read from an inverter, V2.70 or earlier required the file open operation.  
From V3.00, the software automatically shows data upon the completion of data transfer.

#### 4. How to Connect

- VFC64/VFC2001/VFC2001-Z (RoHS-compliant board)



- VFC64SDS/SDS2005



\* Connector part for reference

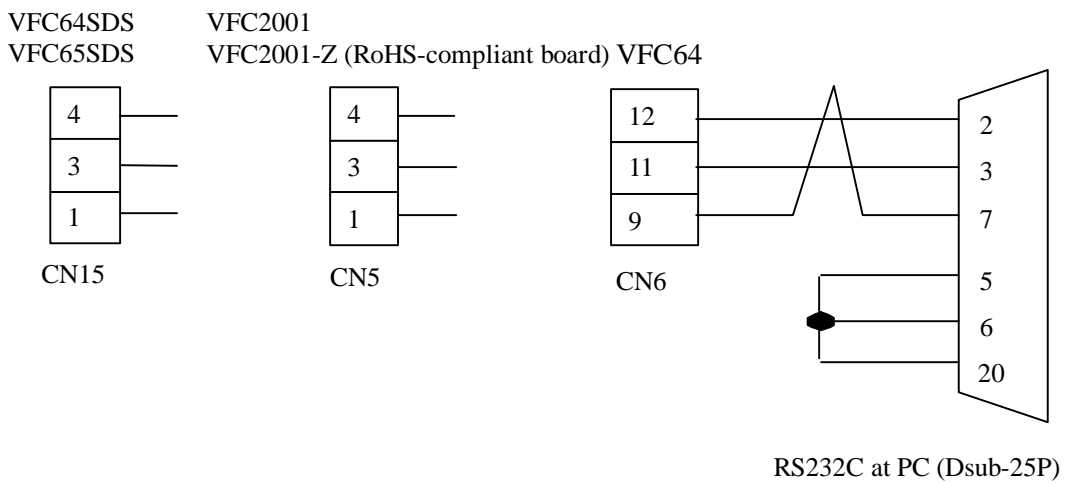


Figure 1 Connection Diagram



(1) Tool Bar

Table 1 lists the details on the Tool bar.

Table 1 List of Tool Bar

Tool Bar	Menu	Function
File	New	Creates a new file
	Open	Opens a saved file
	Save	Saves a file being edited
	Save As...	Saves a new file/Saves an existing file under a different file name
	Close	Closes a file being edited
	Compare Files	Compares the setting values between two files
	Print	Prints the setting value displayed
	Exit	Quits the software
Execute	Data Read	Loads the setting value from the inverter
	Data Write	Writes the setting value to the inverter
Options	Communication Set	Port settings
	Communication Log Reference	Error message appeared at the last writing to the inverter
	Inverter Change	Changes the ROM version of the inverter
Language	Japanese	Displays in Japanese
	English	Displays in English
Help	About...	Detailed information on the software

(2) File Name

Displays the full path name of a file being displayed.

(3) Inverter Information

Displays the machine name, the control mode, the inverter capacity and the ROM version selected.

(4) Shortcut Buttons

Pressing these buttons executes some frequently used functions in the menu.

(5) Items

"Setting area": Displays the area name and number.

"Setting contents": Displays the items of the setting area.

"Setting band (Min/Max)": Displays the settable range.

"Initial value": Displays the initial setting value.

"Setting value": Displays the setting value currently set.

"Decimal Point Position": Displays the number of decimal places in integer.

(Example) If the setting value is "17.345," the decimal point position is "3."

"Significant figures": Displays the number of significant figures in integer excluding a decimal point and a minus sign.

(Example) ○ Setting value: 172.23, Decimal point position: 2, Number of significant figures: 5

× Setting value: 1722.3, Decimal point position: 2, Number of significant figures: 5

## 6. Files

- New

Clicking "New" displays the window shown in Figure 3. Clicking " Inverter Change" also displays the same window.

Select the items in the following order: (1) machine name, (2) control mode, (3) inverter capacity and voltage, and (4) ROM version.

The "OK" button is disabled until the ROM version is selected.

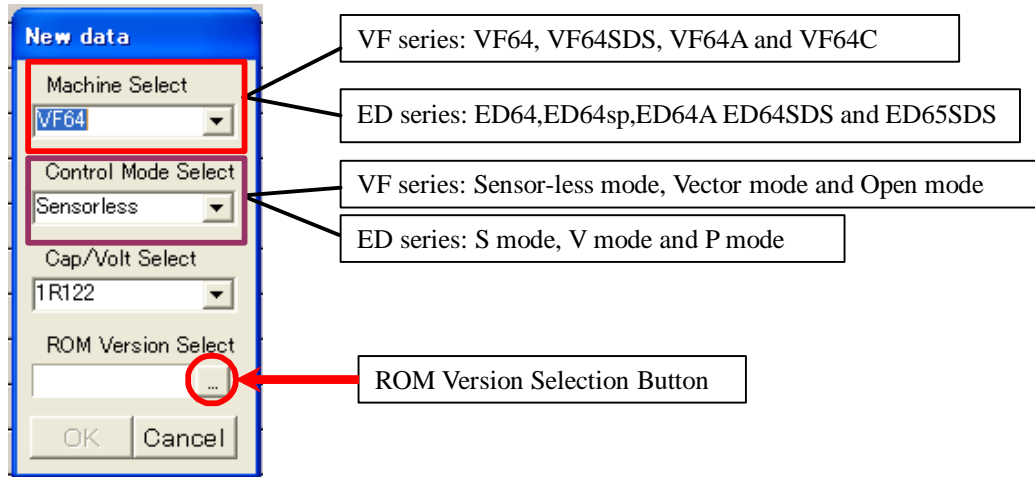


Figure 3 Selection Screen

Clicking the ROM version selection button displays the following menu. From the menu, select a ROM version.

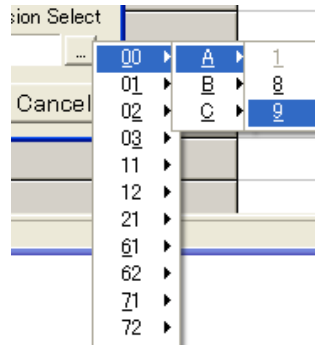


Figure 4 ROM Version Selection Screen

- Open

Opens a saved CSL file. Clicking "Open" displays the "Open" window. From the window, select a file to open.

- Save

Edits and saves the file opened via "Open" without changing the file name.

- Save As...

Saves the file currently opened. Clicking this displays the "Save As..." window.

In the window, enter a file name and save the file. The extension of the file is ".csl."

- Close

Closes the file currently displayed.

- Compare Files

Compares two separate files (the file currently opened and another file). If the setting values differ between the files, "\*" appears in the judgment column. (Refer to Figure 5.)

First open one file. Then select "File" ⇒ "Compare Files", and select the other file from the "Open" window. (Save the file if that is being edited, close the file by selecting "File" ⇒ "Close.")

Note that files can be compared when the machine name, the control mode, and the ROM version in the files are the same. The File Comparison screen can be printed, but **the setting values cannot be changed nor saved.** At printing, "@" appears next to the values that are different between the files.

Initial val.	Setting val.	Another value	Judgment
12	12	12	
24	24	27	*
-24	-24	-24	
30.0	30.0	30.0	
30.0	30.0	31.0	*
0.3	0.3	0.3	
0.3	0.3	0.5	*

Figure 5 File Comparison Screen

- Print

Prints parameters. Figure 6 shows the Print Setting screen. Parameters of the area selected in the "Printing area Set" field. As shown in Figure 6, checking "All check" selects and prints the parameters of all areas. (Indication turns into "Clear" after a click in "All check".)

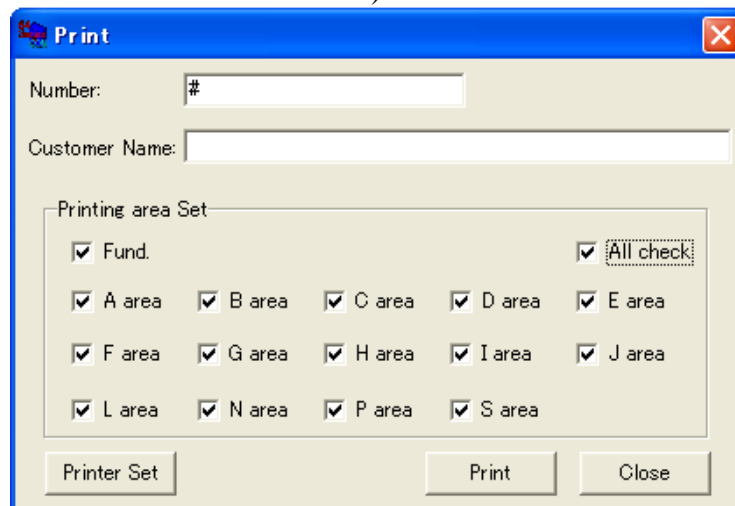


Figure 6 Print Setting Screen

- Exit

Exits the Console Dataset.

## 7. Execute

- Data Read

Loads the setting data from the inverter. Clicking this displays the window shown in Figure 7. Click the "Execute" button. "start !!" appears in the Message field. When reading is properly completed, "end !!" and "Saved under the file name of 'ReadData.csl'" also appear in the Message field.

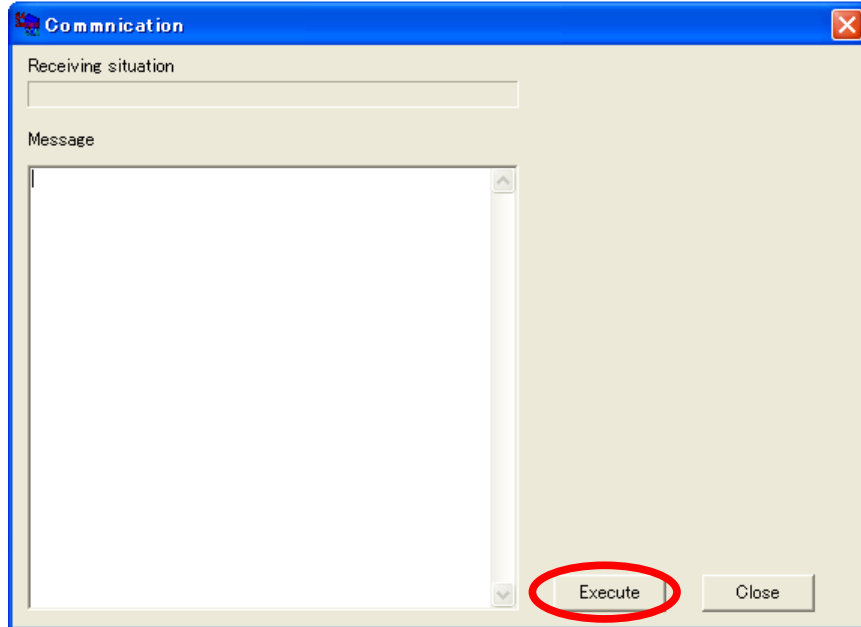


Figure 7 Data Reading Screen

[If an error message appears...]

"Comm Port Open Error !!!"

- Check if the port setting is correct.

"Time out error!!!"

- Check if the board is powered on.
- Check if the cable is connected to the specified connector. Check if the cable is unplugged from the board.

- **Data Write**  
Writes the setting value edited to the inverter. Clicking this displays the window shown in Figure 8.  
If you click the "Execute" button, "start !!" appears in the Message field and the Confirmation Message window appears. Click the "OK" button.  
When writing is properly completed, "end !!" and "Communication Log file name is 'writelog.txt'" also appear in the Message field.
- Options: Use if board is initialized or is exchange.  
 Message: A message appears if the setting value includes an error.  
 Indicate option: Usually, messages for the Fund to J areas appear. When the L, N and O areas are used, mark the checkbox of the areas used before execution.  
 Writing area Set: The starting and ending area of an area to write can be selected.

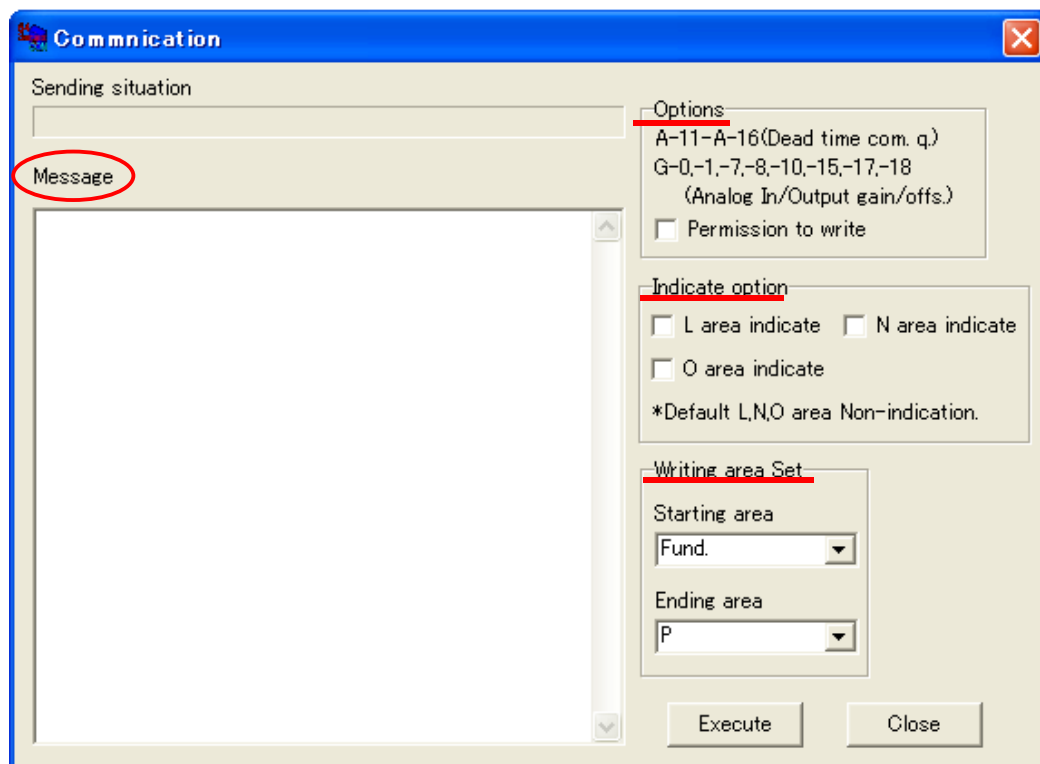


Figure 8 Data Writing Screen

- [If an error message appears...] (Refer to the Read Data section.)
- Check if the cable connecting the board and the PC is unplugged.
  - Check if the port setting is correct.
  - Check if the board is powered on.
  - Check if the cable is connected to the specified connector.

## 8. Options

- Communication Set

Sets the COM port to be used for sending and receiving data. Before reading or writing data, always make the communication setting. Figure 9 shows the Communication Set screen.

Before setting the COM port, make sure the port number on the Device Manager of the Control Panel(Windows system).



Figure 9 Communication Set Screen

(Note) To change the "Writing wait time set," change the setting value larger when "VFC64 is writing to EEPROM" appears in the Message field during data writing.

- Communication Log Reference

Use this function when referring to the communication log "writelog.txt" again. Clicking this displays the window shown in Figure 10. The communication log displays the log of the last communication.

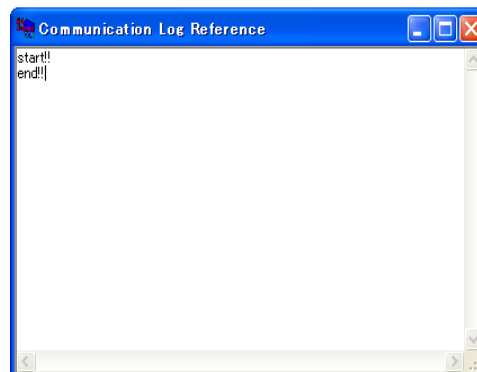


Figure 10 Communication Log Reference Screen

- Change Inverter

Use this function when applying the current setting value to another ROM version. Perform the same operation as "New" Change the ROM version only. (Some combinations cannot be changed.)

## 9. Language

- Japanese/English

Sets the language to be displayed. You can select between "Japanese" and "English."

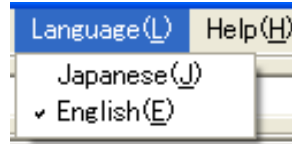


Figure 11 Language Selection Screen

## 10. Help

- Version Information

Displays the information (version) and the user of the software (Figure 12).

"Version" indicates the software version and "Serial No." indicates the serial number at installation.

"File Version" is the version of the current parameter table file.

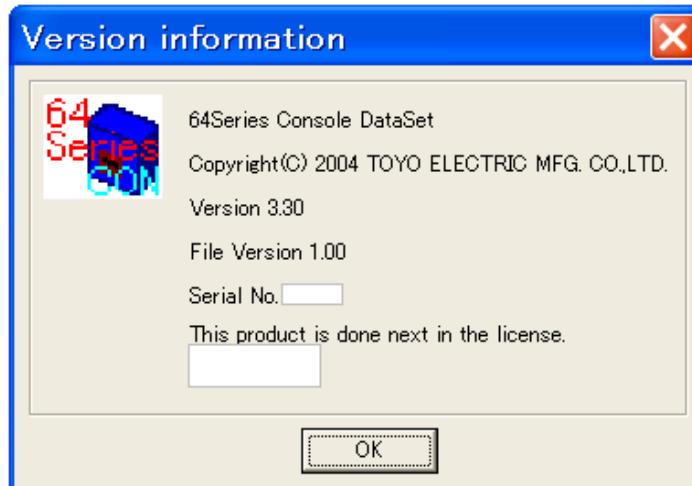


Figure 12 Version Information Screen

## 11. Error Messages

- "The input is wrong."  
⇒ Characters other than integers may be input in the setting value field.
  
- "Number of significant figures is wrong."  
⇒ More than the number of significant figures (Maximum: 5 digits) may be input.
  
- "Decimal point position is wrong."  
⇒ The decimal point position displayed and that of the input value may be different.
  
- "Setting value is greater than the maximum. Set the 'A-0' setting value or lower."  
⇒ This message appears when the input value is greater than "A-0."
  
- "Setting value is lower than the minimum. Set the 'A-1' setting value or greater."  
⇒ This message appears when the input value is lower than "A-1."
  
- "Setting value is greater than the maximum. Set the 'A-1' setting value or greater."  
⇒ This message appears when the input value is negative and lower than "A-1."
  
- "The minimum value is greater than the maximum. Set the setting value lower than 'A-0'."  
⇒ This message appears when the "A-1" value exceeds the "A-0" value.
  
- "Unable to change the ROM version with this voltage and capacity."  
⇒ This message appears when the capacity tables between the versions before/after change are different and a nonexistent capacity is set.
  
- "Unable to compare the files."  
⇒ This message appears when either of the machine name, control mode, capacity and ROM version of the files is not matched at file comparison.

## 12. Update Program

When a new ROM version of the Toyo Denki control boards (VFC boards) is published, V2.70 or earlier of the software requires the parameter table file compliant with the new ROM version added to display, edit and save parameters of the board using the new ROM version. If such file is not provided, the updated version of software must be installed. To save you from such efforts, V3.00 is newly released.

A key point in this update is to enable you to update the software (parameter table file) by yourself. Thus, to update the software, execute the update program by following the instructions below.

1. First, exit the Console Dataset. Then, double-click the Project1.exe. When the update program starts, the screen shown in Figure 1 appears.



Figure 13 Start Screen

2. Click "Next>>." A screen as shown in Figure 2 appears.

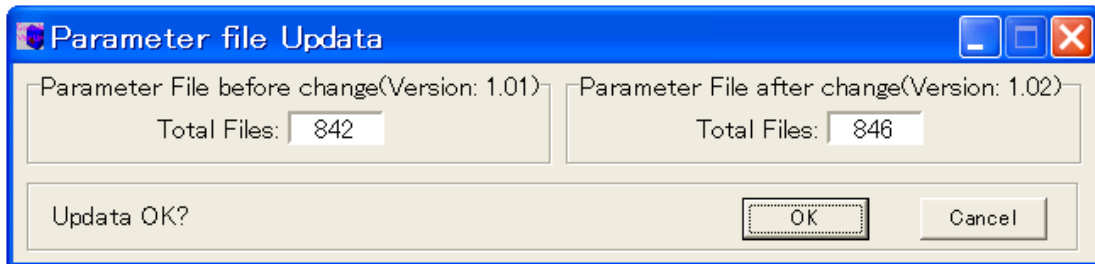


Figure 14 Example of Execution Screen

The current parameter file version and the number of the total files before change appear on the left side.

The parameter file version and the number of the total files after change appear on the right side.

3. Clicking "OK" displays the message shown in Figure 3. Select "Yes to All."

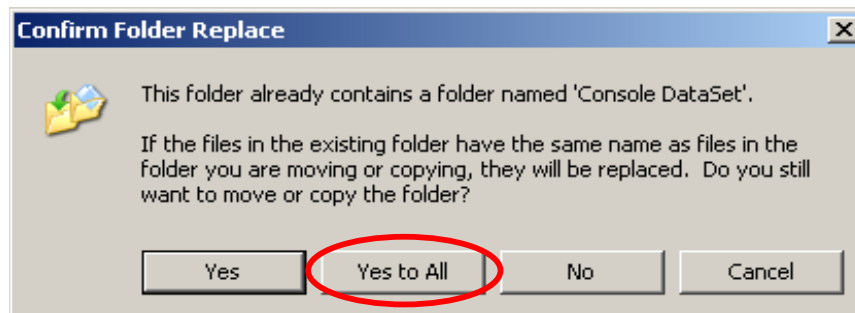


Figure 15 Message Screen

4. After the data is copied, the message shown in Figure 4 appears.

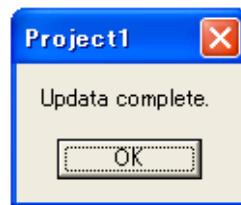


Figure 16 Message Screen

5. The update is completed. Click "Close" to exit the program.  
Start the Console Dataset and select "Help" ⇒ "Version Information."  
Please confirm whether the "File Version" was changed.

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<http://www.toyodenki.co.jp/>

<b>HEAD OFFICE</b>	No.1 Nurihiko Bldg. 9-2 Kyobashi 2-chome, Chuo-ku, Tokyo, Japan TEL. +81-3-3535-0652 or 0653 FAX. +81-3-3535-0660	ZIP CODE 104-0031
<b>OSAKA BRANCH</b>	Higashi Hankyu Bldg. Kakuta-cho 1-1, Kita-ku, Osaka, Japan TEL. +81-6-6313-1301 FAX. +81-6-6313-0165	ZIP CODE 530-0017
<b>NAGOYA BRANCH</b>	Toyo Bldg. 14-16, Meieki 3-chome Nakamura-ku, Nagoya Japan TEL. +81-52-541-1141 FAX. +81-52-586-4457	ZIP CODE 450-0002
<b>TAIPEI BRANCH</b>	4F, 308, 6, Min Chaun E, Rd Taipei TEL / FAX. +886-2-2632-3251	

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