Thank you for choosing the Mitsubishi general-purpose AC servo MELSERVO Servo Configuration Software. To optimize the use of the Servo Configuration Software, please read over this Installation Guide and the corresponding AC servo Installation Guide before using the software. After reading the Installation Guide, always place this Installation Guide in a safe place.
Safety Instructions

(Always read these instructions before using the equipment.)

Do not attempt to install, operate, maintain or inspect the servo amplifier and servo motor until you have read through this Installation Guide, and appended documents carefully and can use the equipment correctly. Do not use the servo amplifier and servo motor until you have a full knowledge of the equipment, safety information and instructions.

In this Installation Guide, the safety instruction levels are classified into "WARNING" and "CAUTION".

⚠️ WARNING
Indicates that incorrect handling may cause hazardous conditions, resulting in death or severe injury.

⚠️ CAUTION
Indicates that incorrect handling may cause hazardous conditions, resulting in medium or slight injury to personnel or may cause physical damage.

Note that the CAUTION level may lead to a serious consequence according to conditions. Please follow the instructions of both levels because they are important to personnel safety.

What must not be done and what must be done are indicated by the following diagrammatic symbols:

🚫: Indicates what must not be done. For example, "No Fire" is indicated by 🚫.
✔️: Indicates what must be done. For example, grounding is indicated by ✅.

In this Installation Guide, instructions at a lower level than the above, instructions for other functions, and so on are classified into "POINT".

After reading this Installation Guide, always keep it accessible to the operator.

⚠️ CAUTION
• Before executing the test mode, always read Section 2.3 "Precaution for test mode".

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• All other company and product names contained in this Installation Guide are registered trademarks or trademarks of their respective companies.
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1. INTRODUCTION

1.1 Specifications

Using the communication function of the servo amplifier, the Servo Configuration Software allows functions, such as parameter setting change, point data maintenance, graph, program operation mode and test mode, to be implemented from a personal computer.

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### 1. INTRODUCTION

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Trend Graph in the monitor function and Graph display before alarm in the alarm function may be used by the servo amplifiers having the following software versions. If Trend Graph or Graph display before alarm is used by the other servo amplifier, a communication error will occur but the other functions may be used.

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<td>BCD-B15W000-B0 or later</td>
</tr>
<tr>
<td>MR-C</td>
<td>BCD-B18W000-A1 or later</td>
</tr>
<tr>
<td>MR-J2-C-S100</td>
<td>BCD-B20W304-A2 or later</td>
</tr>
</tbody>
</table>
1. INTRODUCTION

1.2 System configuration

1.2.1 Components

To use the Servo Configuration Software, the following components are required in addition to the servo amplifier and servo motor. Configure the system according to the Installation Guide of each equipment:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>(Note 1) Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OS</strong></td>
<td>Microsoft® Windows® 8.1 Enterprise Operating System</td>
</tr>
<tr>
<td></td>
<td>Microsoft® Windows® 8.1 Pro Operating System</td>
</tr>
<tr>
<td></td>
<td>Microsoft® Windows® 8.1 Operating System</td>
</tr>
<tr>
<td></td>
<td>Microsoft® Windows® 8 Enterprise Operating System</td>
</tr>
<tr>
<td></td>
<td>Microsoft® Windows® 8 Pro Operating System</td>
</tr>
<tr>
<td></td>
<td>Microsoft® Windows® 8 Operating System</td>
</tr>
<tr>
<td></td>
<td>Microsoft® Windows® 7 Enterprise Operating System</td>
</tr>
<tr>
<td></td>
<td>Microsoft® Windows® 7 Ultimate Operating System</td>
</tr>
<tr>
<td></td>
<td>Microsoft® Windows® 7 Professional Operating System</td>
</tr>
<tr>
<td></td>
<td>Microsoft® Windows® 7 Home Premium Operating System</td>
</tr>
<tr>
<td></td>
<td>Microsoft® Windows® 7 Home Basic Operating System</td>
</tr>
<tr>
<td></td>
<td>Microsoft® Windows® Vista® Enterprise Operating System</td>
</tr>
<tr>
<td></td>
<td>Microsoft® Windows® Vista® Ultimate Operating System</td>
</tr>
<tr>
<td></td>
<td>Microsoft® Windows® Vista® Business Operating System</td>
</tr>
<tr>
<td></td>
<td>Microsoft® Windows® Vista® Home Premium Operating System</td>
</tr>
<tr>
<td></td>
<td>Microsoft® Windows® Vista® Home Basic Operating System</td>
</tr>
<tr>
<td></td>
<td>Microsoft® Windows® XP Professional Operating System</td>
</tr>
<tr>
<td></td>
<td>Microsoft® Windows® XP Home Edition Operating System</td>
</tr>
<tr>
<td></td>
<td>Microsoft® Windows® 2000 Professional Operating System</td>
</tr>
<tr>
<td></td>
<td>Microsoft® Windows® NT® Workstation Operating System Version 4.0</td>
</tr>
<tr>
<td></td>
<td>Microsoft® Windows® Millennium Edition Operating System</td>
</tr>
<tr>
<td></td>
<td>Microsoft® Windows® 98 Second Edition Operating System</td>
</tr>
<tr>
<td></td>
<td>Microsoft® Windows® 98 Operating System</td>
</tr>
<tr>
<td></td>
<td>Microsoft® Windows® 95 Operating System</td>
</tr>
<tr>
<td><strong>CPU</strong></td>
<td>Pentium133MHz or more(Windows® 95, Windows® 98, Windows NT® Workstation 4.0, Windows® 2000)</td>
</tr>
<tr>
<td></td>
<td>Pentium150MHz or more(Windows® Me)</td>
</tr>
<tr>
<td></td>
<td>Pentium300MHz or more(Windows® XP)</td>
</tr>
<tr>
<td></td>
<td>32-bit (x86) processor of 1GHz or more(Windows Vista®)</td>
</tr>
<tr>
<td><strong>Memory</strong></td>
<td>64-bit (x86) processor of 1GHz or more(Windows Vista®)</td>
</tr>
<tr>
<td></td>
<td>32-bit (x86) or 64-bit (x64) processor of 1GHz or more(Windows® 7, Windows® 8, Windows® 8.1)</td>
</tr>
<tr>
<td><strong>Hard Disk</strong></td>
<td>30MB or more of free space</td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td>Serial port</td>
</tr>
<tr>
<td><strong>Display</strong></td>
<td>One whose resolution is 800×600 or more and that can provide a high color (16 bit) display.</td>
</tr>
<tr>
<td><strong>Keyboard</strong></td>
<td>Connectable with the above personal computer.</td>
</tr>
<tr>
<td><strong>Mouse</strong></td>
<td>Connectable with the above personal computer.</td>
</tr>
<tr>
<td><strong>Printer</strong></td>
<td>Connectable with the above personal computer.</td>
</tr>
<tr>
<td><strong>Communication cable</strong></td>
<td>MR-HPCATCHBL3M, MR-CFCATCHBL3M, MR-JRPRATCHBL3M</td>
</tr>
<tr>
<td><strong>RS-232C option unit</strong></td>
<td>Required when using the Servo Configuration Software with the MR-C servo amplifier.</td>
</tr>
</tbody>
</table>

Note 1. Windows and Windows NT are the registered trademarks of Microsoft Corporation in the United State and other countries.

2. Pentium is the registered trademarks of Intel Corporation.

3. On some personal computers, this software may not run properly.

4. If Microsoft® Windows® XP or later is used, the following functions cannot be used. If any of the following functions is used, this product may not operate normally:
   - Start of application in Windows® compatible mode
   - Fast user switching
   - Remote desktop
   - Big fonts (Detail settings of screen property)
   - DPI setting other than the normal size (96DPI (Detail settings of screen property)

5. If Windows Vista® or later is used, log in as a user having Administrator privileges.

6. If Windows® 7 or later is used, the following functions cannot be used.
   - Windows XP Mode
   - Touch

7. If Windows® 8 or later is used, the following functions cannot be used.
   - Hyper-V
   - Modern UI Style
1. INTRODUCTION

1.2.2 Communication cable

(1) Selection

Use a communication cable for connection of the personal computer and the servo amplifier. Choose the communication cable according to the shape of the RS-232C connector of the personal computer used.

**POINT**

- Depending on the personal computer used, any of the following cables may be used. Confirm the RS-232C connector signal carefully, refer to this section and fabricate the cable.

<table>
<thead>
<tr>
<th>Type</th>
<th>Length [m(feet)]</th>
<th>Servo amplifier or Interface unit</th>
<th>Application</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Connector: DE-9SF-N Case: DE-C1-J6-S6 (Japan Aviation Electronics)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Connector: DE-9SF-N Case: DB-C1-J6-S6 (Japan Aviation Electronics)</td>
</tr>
<tr>
<td>MR-J RPCATCBL3M</td>
<td>3 (9.84)</td>
<td>MR-J 2-03A5 MR-J 2-03B5 MR-J 2-03C5</td>
<td>For IBM series (D-SUB 9 pins)</td>
<td>Connector: 5557-04R-210 Terminal: 5556 (molex)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Connector: DE-9SF-N Case: DE-C1-J6-S6 (Japan Aviation Electronics)</td>
</tr>
</tbody>
</table>

For fabrication, refer to the connection diagram in this section. When fabricating the cable, read and follow the instructions below:

1) Always use a multi-core cable with a shield and connect the shield to FG securely.
2) Wiring distance depends on surrounding environment but should be as short as possible. Maximum distance is 15m(49.2feet) in environmentally good places with little noise, e.g. offices.
1. INTRODUCTION

(2) Communication connector signal pin-outs

a) MR-H-A(N)/B(N)/AC(N)/TN
   Servo amplifier side connector (CN4)

   ![Diagram](image)

   Note: Pin 9 is designed for use with a parameter unit power supply and cannot be used for other purposes.

b) MR-C: RS-232C option side connector (CN3A)
   MR-j 2-A/B/C: Servo amplifier side connector
   MR-j 2-A-XA(CN3)
   MR-j 2-C-S100

   ![Diagram](image)

   ![Diagram](image)

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   ![Diagram](image)
1. INTRODUCTION

1.2.3 Configuration diagrams

(1) MR-H-A(N)/B(N)/AC(N)/TN

![Diagram of MR-H-A(N)/B(N)/AC(N)/TN configuration]

(2) MR-C

![Diagram of MR-C configuration]

(3) MR-J2-A/B/C

![Diagram of MR-J2-A/B/C configuration]

(4) MR-J2-03A5/03B5/03C5

![Diagram of MR-J2-03A5/03B5/03C5 configuration]
1. INTRODUCTION

1.3 Basic terms

1) Mouse pointer
   An on-screen arrow which moves with movements of the mouse.
2) Point
   To move the mouse pointer to a particular item or position on the screen.
3) Click
   To press and release the left button of the mouse once.
4) Double-click
   To press and release the left button of the mouse twice.
5) Drag
   To hold down the left button of the mouse and move the mouse.
6) Focus
   Highlights characters, button or the like when the menu or button is ready to accept an input from the keyboard.
7) Text box
   Box used to enter characters.
8) List box
   Box used to select one of several items.

9) Combo box
   Box used to select one of several items.
10) Check box
    Box used to select one or more of several items. When a choice is made a mark appears in the box.
11) Option button
    Button used to select only one of several items. When a choice is changed ☑ moves to a new choice.
1.4 Basic operations

(1) Closing the window
Click the closing bottom at top right corner of the window.

(2) Moving the focus from one window to another
Click the button of the task bar corresponding to the window to be used.

(3) Moving the window
Point to the title bar, drag the window to the required position, and release the button.
1. INTRODUCTION

(4) Moving the focus to the menu bar

Click the menu bar. To move the focus to a window, click the window.

![Menu Bar Focus](image)

(5) Moving the focus inside the window

Click the object to be operated (such as a text box). When the object to be operated is a button, clicking it will start its processing.

![Window Focus](image)

<Short-cut keys>

Any of the following short-cut keys may be used to perform operation from the keyboard:

<table>
<thead>
<tr>
<th>Intended operation</th>
<th>Keyboard</th>
</tr>
</thead>
<tbody>
<tr>
<td>End program</td>
<td>“Alt” + “F4”</td>
</tr>
<tr>
<td>Show start menu</td>
<td>“Ctrl” + “Esc”</td>
</tr>
<tr>
<td>Change window</td>
<td>“Alt” + “Tab”</td>
</tr>
<tr>
<td>Change object</td>
<td>“Tab”</td>
</tr>
</tbody>
</table>
1. INTRODUCTION

1.5 Screen definitions

1) Title bar
2) Menu title
3) Menu bar
   Shows the menu title.
4) MenuCommand menu in tier 1
5) System setting display area
   Shows the servo amplifier and baudrate which have been set.
1. INTRODUCTION

1.6 Installation procedure

In this procedure, it is assumed that the hard disk drive of the personal computer is C and the CD drive is D.
Before running this program, always close all Windows programs.

1) Insert CD-ROM in Drive D (CD drive). Then, click the “Start” button of the task bar to open the start menu, specify the file name, and click “Run”. When the following window has appeared, type “D:\SETUP81E\DISK\SETUP.EXE” and click the “OK” button.

![Run window]

2) After the above window, the following window appears. Click “Next>” button.

![InstallShield Wizard window]
3) The User Information screen appears. Type your full name and company name and click “Next>” button.

4) The Choose Destination Location screen appears. When you specify the destination folder and click “Next>” button, installation starts.
5) When installation ends, any of the following screens appears. Click the “Finish” button to exit from Setup.

![InstallShield Wizard Complete]

```
InstallShield Wizard Complete

Setup has finished installing Server Configuration SAM on your computer.
```

**POINT**

- In the corresponding window, to stop installation, click the “Cancel” button or press the “Escape”.
2. HOW TO USE THE SOFTWARE

2.1 Operation

The method of selecting the command is the operation procedures using the mouse. Unavailable commands are grayed out.

2.1.1 Start-up

1. Windows® 7 or earlier
   1) Click the “Start” button of the task bar to open the menu.
   2) Point to submenu “MELSERVO”, “SETUP Software” from “Programs”. Then, Click “SETUP81E”.

2. Windows® 8
   1) Using the mouse, right click on the start screen to display the Apps Views from “All apps”.
   2) Click on “SETUP81E” from the “MELSERVO” group.

3. Windows® 8.1
   1) From the arrow button located on the lower left of the start screen, the Apps View is displayed.
   2) Click on “SETUP81E” from the “MELSERVO” group.

2.1.2 Command selection procedures

1. Clicking method
   1) Click the menu title on the menu bar to open the menu.
   2) Point to and click the command to be selected.

2. Dragging method
   Point to the menu title on the menu bar, hold down the left button and drag the mouse to the command to be selected, and release the button.

<table>
<thead>
<tr>
<th>Test</th>
<th>Advanced-function</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOG</td>
<td></td>
</tr>
<tr>
<td>Positioning</td>
<td></td>
</tr>
<tr>
<td>Operation w/o motor</td>
<td></td>
</tr>
<tr>
<td>Forced output</td>
<td></td>
</tr>
<tr>
<td>Demo mode</td>
<td></td>
</tr>
<tr>
<td>Single-step Feed</td>
<td></td>
</tr>
<tr>
<td>Program Test</td>
<td></td>
</tr>
</tbody>
</table>
2. HOW TO USE THE SOFTWARE

2.1.3 Operation procedures within the window

Within the operation window, enter data and/or press the button.

(1) Pressing a button
   Click the button in the window.

(2) Entering data
   Click the setting area to move the focus there, and enter data from the keyboard.

(3) Selecting data
   Click the data to be selected.

(4) Selecting the combo box data, etc.
   1) Click on the right of the setting portion to open the combo box.
   2) Make selection by clicking the data or like to be chosen.

(5) Pressing the option button
   Click the item or button.
2.2 Commands and display windows

The following diagram shows a sequence of commands and windows.

```
Initial screen

Menu
- File
  - Open
  - Save
  - Print
  - Exit

- System
  - System settings
  - Station Selection
  - Automatic Demo
  - Version Information

- Monitor
  - Amplifier Data
  - High Speed Monitor
  - Trend Graph

- Alarms
  - Display
  - History
  - Amplifier Data

Command
- Display window
  - File selection
  - System settings
  - Station settings
  - Automatic Demo
  - Version Information
  - Amplifier Data Display
  - High Speed Monitor
  - Graph
  - Alarm Display
  - Alarm History
  - Amplifier Data
  - Alarm-reset
  - Alarm-history-clear
  - Graph display before alarm
  - Axis Selection
  - Scale change
```

To next page
2. HOW TO USE THE SOFTWARE

2.3 Precautions for test mode

| WARNING | • Always touch the switches with dry hands. You may get an electric shock if you touch them with wet hands.  
| | • Always operate the equipment with the front cover installed. Removing the front cover will expose the terminals and charged area having high voltages, which may lead to an electric shock.  
| | • Keep the front cover closed while power is on the equipment is running. Otherwise, you may get an electric shock. |

| CAUTION | • Before starting operation, make sure that the parameters are set to correct values. Depending on machines, they may operate unpredictably.  
| | • While power is on or for some time after power-off, keep clear of the servo amplifier’s heat sink and regenerative brake resistor, the servo motor, etc. as they may be high temperatures. Otherwise, you may get burned. |

(1) Servo on
In the Jog, Positioning, Demo Mode or Single-step Feed available in the Test, the servo amplifier’s digital input signal SON is automatically switched on in the servo amplifier to start operation, independently of the ON/OFF status of SON. Also, any external command pulse or input signal (except emergency stop) is not accepted until the test mode window is closed to terminate the command.
SON is automatically switched on by the following operation:

<table>
<thead>
<tr>
<th>Test mode</th>
<th>Mouse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jog</td>
<td>Click the “Forward” or “Reverse” button. The servo motor rotates while you are clicking the button.</td>
</tr>
<tr>
<td>Positioning</td>
<td>Click the “Forward” or “Reverse” button.</td>
</tr>
<tr>
<td>Demo Mode</td>
<td>Click the “Start” button.</td>
</tr>
</tbody>
</table>

(2) Stop

| POINT | To make an emergency stop, switch off the emergency stop signal of the servo amplifier or shut off the input power. |

1) Perform the following operation to stop the test mode:

<table>
<thead>
<tr>
<th>Test mode</th>
<th>Mouse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jog</td>
<td>Click the “Pause” button.</td>
</tr>
<tr>
<td>Positioning</td>
<td>Click the “Pause” button.</td>
</tr>
<tr>
<td>Demo Mode</td>
<td>Click the “Reset” button.</td>
</tr>
</tbody>
</table>

2) The servo motor will stop if either of the following situations occurs in the test mode:
• The communication cable is disconnected.
• If the window is dragged or the other menu is opened, communication between the personal computer and the servo amplifier may be suspended temporarily, stopping the servo motor temporarily.
2.4 Simple language for program operation

The language used in the program operation-edit window will be described below.

2.4.1 Language

The chart below describes the commands in the program operation-edit window to execute the program operation mode, in which the MR-H-A(N) or MR-J2-A and MR-J2-03A5 goes into the position control mode.

Describe a program in upper case characters and Enter or Return at the end of a line. Up to 300 lines may be described.

<table>
<thead>
<tr>
<th>Command</th>
<th>Name</th>
<th>Setting (**: Set value)</th>
<th>Setting range</th>
<th>Unit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPN</td>
<td>Feedrate</td>
<td>SPN (**), Set value</td>
<td>0 to permissible instantaneous speed</td>
<td>r/min</td>
<td>Used to set the command speed given to the servo motor for positioning. The set value should be not more than the permissible speed of the servo motor used.</td>
</tr>
<tr>
<td>STC</td>
<td>Acceleration/deceleration time</td>
<td>STC (**), Set value</td>
<td>0 to 50000 ms</td>
<td>ms</td>
<td>Used to set the acceleration/deceleration time. (Time required to reach the rated speed of the corresponding servo motor.)</td>
</tr>
<tr>
<td>MOV</td>
<td>Move command</td>
<td>MOV (**), Set value</td>
<td>-9999999 to 9999999 pulse</td>
<td>pulse</td>
<td>Used to execute movement by the preset pulses. Positioning operation is performed with the set values of the feedrate (SPN) and acceleration/deceleration time (STC).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No symbol: CCW rotation, : CW rotation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Used to hold the next operation until the preset digital input signal (DI) of the servo amplifier switches on. By setting 99, the next operation will be performed unconditionally. Set the input signal as listed below. For the MR-J2-A, any signal not allocated by signal assignment in the position control mode using parameters No. 43 to 48 will be invalid if it is selected. This command is unavailable for the MR-H-B and MR-J2-B.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SYNC</td>
<td>Waiting external signal to switch on</td>
<td>SYNC (**), Set value</td>
<td>As listed in the table at right.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TIM</td>
<td>Dwell command time</td>
<td>TIM (**), Set value</td>
<td>1 to 50 s</td>
<td>s</td>
<td>Used to hold the next operation until the preset time elapses.</td>
</tr>
<tr>
<td>TIMES</td>
<td>Program count command</td>
<td>TIMES (**), Set value</td>
<td>1 to 99 Times</td>
<td></td>
<td>Used to specify the number of cycles or times (from TIMES to STOP) that the positioning is to be repeated. Enter the TIMES (** at the beginning and STOP at the end of a cycle. Not required for one positioning cycle.</td>
</tr>
<tr>
<td>STOP</td>
<td>Program stop</td>
<td></td>
<td></td>
<td></td>
<td>Used to stop the program being executed. Need not be described on the last line.</td>
</tr>
</tbody>
</table>
2.4.2 Program example

As soon as the “Start” button is clicked, SON is switched on automatically to start operation.

Timing chart

Program

TIMES (3) ......................... Repeats the program up to STOP three times.
SYNC (0) ........................... Holds the program from running until the input signal with the set value of 0 (SON) switches on.
SPN (1000) ....................... Sets the command speed to 1000r/min.
STC (1200) ....................... Sets the acceleration/deceleration time to 1200ms.
MOV (12000) ..................... Executes movement by 12000 pulses in the CCW direction.
TIM (10) .......................... Hold the next operation for 10s.
SPN (2000) ....................... Sets the command speed to 2000r/min.
MOV (−100000) .................. Executes movement by 100000 pulses in the CW direction.
STOP

In this example, the acceleration/deceleration time in Operations 1 and 2 are the same.
In this case, the acceleration/deceleration time in Operation 2 need not be set. In this way, set values different from those in the preceding operation need only be described in the operation program.

2.4.3 Instruction

When the program operation mode is executed with the program operation mode window and another window (Amplifier Data Display window) being displayed at the same time, the program may progress slower, making the dwell command time longer than the set value.
3. TROUBLESHOOTING

3.1 Communication error

If communication between the personal computer and the servo amplifier is suspended and the communication error as shown in the following window occurs, check the code on the right of the error message and remove its cause.

<Possible cause> Noise entry, hard disk fault, wiring fault, etc.

![Communication error window]

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>Parity error occurred in the data sent from the personal computer.</td>
</tr>
<tr>
<td>002</td>
<td>Checksum error occurred in the data sent from the personal computer.</td>
</tr>
<tr>
<td>003</td>
<td>Character not given in the specifications was sent to the servo amplifier.</td>
</tr>
<tr>
<td>004</td>
<td>Command not given in the specifications was sent to the servo amplifier.</td>
</tr>
<tr>
<td>005</td>
<td>Data number not given in the specifications was sent to the servo amplifier. Data outside the permissible range was sent to the servo amplifier.</td>
</tr>
<tr>
<td>None</td>
<td>Checksum error occurred in the data received by the personal computer.</td>
</tr>
</tbody>
</table>

3.2 Message at startup

The window below appears at startup of this setup software when Windows Vista® or later is used. Select “Yes”.

![User Account Control window]
3. TROUBLESHOOTING

3.3 Message at program shutdown

The window below appears at program shutdown when Windows Vista® or later is used. Select “This program is installed correctly”.

3.4 HELP display

HELP may not be displayed when Windows Vista® or later is used. In that case, follow the window below which always appears at the HELP startup, and install “WinHelp32.exe”, which is required for the HELP display.
**REVISIONS**

*The manual number is given on the bottom left of the back cover.*

<table>
<thead>
<tr>
<th>Print Data</th>
<th><em>Manual Number</em></th>
<th>Revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov., 1996</td>
<td>IB (NA) 67253-A</td>
<td>First edition</td>
</tr>
<tr>
<td>Aug, 1997</td>
<td>IB (NA) 67253-B</td>
<td>Description changed for compatibility with Windows 95. MR-J2-B servo amplifier added. Section 2-4-1: Note on MR-H-B and MR-J2-B added to command SYNC.</td>
</tr>
<tr>
<td>Jan., 1998</td>
<td>IB (NA) 67253-C</td>
<td>Command names, etc. reviewed.</td>
</tr>
<tr>
<td>Feb., 2000</td>
<td>IB (NA) 67253-D</td>
<td>MR-J2-C servo amplifier is added. MR-H-TN servo amplifier is added. MR-H-AN/BN/ACN servo amplifier is added. MR-J2-03A5 servo amplifier is added. MR-J2-03C5 servo amplifier is added. Section 1-1: Specification item table change and addition Section 1-3-1: Communication cable addition Section 1-3-2 (1): Communication cable addition Section 1-3-2 (2): Specification addition Section 1-3-2 (3): Cable connection diagram addition Section 1-3-3: Configuration diagram addition Section 2-2: Command name and display window addition Section 2-3 (1): Table modification Section 2-3 (2): Addition Section 2-4-1: Specification item table change Section 2-5: Addition</td>
</tr>
<tr>
<td>Jan., 2002</td>
<td>IB (NA) 67253-E</td>
<td>Caution 4: Description changed Caution 5: Deleted Section 1-3-1: Table modified Section 1-3-2 (1): PC98 series deleted Section 1-3-2 (3): MR-HPC98CBL3M diagram deleted Section 1.7: Overall change</td>
</tr>
<tr>
<td>Aug., 2003</td>
<td>IB (NA) 67253-F</td>
<td>Overall changes to the form Addition of MR-J2-03B5 servo amplifiers</td>
</tr>
<tr>
<td>Jun., 2015</td>
<td>IB (NA) 67253-G</td>
<td>Section 1.2.1: Addition of Windows Vista®, Windows® 7, Windows® 8, Windows® 8.1 Reexamination of table format Note is changed Section 1.4: Reexamination of short-cut keys Section 1.6: Correction of erroneous description The screen is changed Section 2.1.1: Reexamination of startup method Section 2.4.2: Correction of erroneous description Section 3.2: Deletion of &quot;Screen unprintable&quot; Addition of &quot;Message at startup&quot; Section 3.3: Addition of &quot;Message at program shutdown&quot; Section 3.4: Addition of &quot;HELP display&quot;</td>
</tr>
</tbody>
</table>