



# Method for Operating Imc30

This section explains how to operate Imc30. The primary function of Imc30 is to generate a machine language file in the Motorola S format from the absolute module files generated by In30.

## Command Parameters

The table below lists the command parameters available for Imc30.

<b><i>Parameter name</i></b>	<b><i>Function</i></b>
<b>File name</b>	<b>Absolute module file name to be processed by Imc30.</b>
<b>-.</b>	<b>Disables message output to screen.</b>
<b>-ID</b>	<b>ID code check ID code setting</b>
<b>-E</b>	<b>Sets the starting address.</b>
<b>-H</b>	<b>Converts file into Intel HEX format.</b>
<b>-L</b>	<b>Selects maximum length of data record area.</b>
<b>-O</b>	<b>Specifies output file name.</b>
<b>-protect1</b>	<b>ROM code protect function level 1 setting</b>
<b>-protect2</b>	<b>ROM code protect function level 2 setting</b>
<b>-V</b>	<b>Indicates version of load module converter.</b>

## Rules for Specifying Command Parameters

Follow the rules described below when you specify the command parameters for Imc30.

### Order in which to specify command parameters

Always be sure to specify command parameters in the following order:

- 1 Command option**
- 2 Absolute module file name (essential)**

```
>lmc30 (command option) (absolute module file name)
```

### **Absolute module file name (essential)**

- **Specify the absolute module file generated by ln30.**
- **Specify only one absolute module file name.**
- **The file extension (.x30) can be omitted.**
- **No file names can be specified unless their extension is ".x30".**

### **Command options**

- **Specify command options as necessary.**
- **Multiple command options can be specified.**
- **When specifying multiple command options, the command options can be entered in any order.**

### **as30 Command Options**

This section explains how to specify the command options of lmc30.

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## Disables Message Output to Screen

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### Function

- The software does not output messages when lmc30 is processing.
- Error messages are output to screen.

### Description rule

- Always be sure to specify this option before the file name.

### Description example

```
>lmc30 -. debug
```



-E

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## Sets the Starting Address

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### Function

- **Set the starting address.**
- **Output to a Motorola S format file beginning with the address you have set.**
- **The Motorola S format file is output with the setting starting address.**

### Description rule

- **Input this option using a form like -E (address value).**
- **Always be sure to insert a space between this option and the value.**
- **Always be sure to use hexadecimal notation when specifying an address value.**
- **If the address value begins with an alphabet ('a' to 'f'), always be sure to add 0 at the beginning of the value as you enter it.**

*Precaution*

*This option cannot be specified simultaneously with "- H".*

### Description example

```
>lmc30 -E 0f0000 debug
```

A "debug.mot" file is generated that starting address is 0f000H.

```
>lmc30 -E 8000 debug
```

A "debug.mot" file is generated that starting address is 8000H.

**-H**

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**Converts File into Intel HEX Format**

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### **Function**

- The lmc30 generates an Intel HEX format file.
- The lmc30 generates an Original HEX format for Mitsubishi micro-computers if the address value exceeds 1Mbytes.

### **Description rule**

- Specify this option before entering a file name.
- This option cannot be specified simultaneously with option "-E".

### **Description example**

```
>lmc30 -H debug
```

**-L**

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**Selects Maximum Length of Data Record Area**

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### **Function**

- The data record length of the Motorola S format is set to 32 bytes.
- The data record length of the Intel HEX format is set to 32 bytes.

### **Description rule**

- Specify this option before entering a file name.

### **Description example**

```
>lmc30 -L debug
```

**-O**

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**Specifies Output File Name**

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### **Function**

- **Specify the file name of the machine language file generated by lmc30.**
- **A path can be specified in the file name.**

### **Description rule**

- **Input this option using a form like -O (file name).**
- **Always be sure to insert a space between this option and the file name.**
- **Specify this option before entering a file name.**
- **The file name cannot be specified with an extension. A default extension is used for the generated file: ".mot" for the Motorola S format and ".hex" for the Intel HEX format.**

### **Description example**

```
>lmc30 -O test debug
  A "test.mot" file is generated.
>lmc30 -O tmp\test debug
  A "test.mot" file is generated in the "tmp" directory.
```

**-protect1**

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**ROM code protect function level 1 setting**

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### **Function**

- For details on the ROM code protect function, see the hardware manual of the microcomputer.
- 3F is stored in address FFFFF. Unless this option is specified, FF is stored in address FFFFF.
- Always specify this command option in small letters.
- The protect2 option cannot be specified at the same time as the protect1 option.

### **Description example**

```
>lmc30 -protect1 test
```

**-protect2**

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**ROM code protect function level 2 setting**

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### **Function**

- For details on the ROM code protect function, see the hardware manual of the microcomputer.
- F3 is stored in address FFFFF. Unless this option is specified, FF is stored in address FFFFF.
- Always specify this command option in small letters.
- The protect1 option cannot be specified at the same time as the protect2 option.

### **Description example**

```
>lmc30 -protect2 test
```

-V

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Indicates Version Number

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### **Function**

- **The software indicates the version number of lmc30.**

*Precaution*

*If this option is specified, all other parameters on the command line are ignored.*

### **Description rule**

- **Specify this option only and nothing else.**

### **Description example**

```
>lmc30 -V
```