

Report of Mech-Mind 3D vision sensor integration sample library release

■ Date of issue

January 2026

■ Applicable models

MELFA FR series and MELFA CR series (for CR800 series controllers)

Thank you for your continued support of Mitsubishi Electric industrial robot "MELFA". This technical news describes the release of a sample library for integrating the CR800 series controllers with the 3D vision sensors manufactured by Mech-Mind.

1 Features

Previously, each communication command required creating and reading 20 to 100 lines of robot programs. With this sample library, a single line of command can retrieve necessary information and perform communication.

A program of approximately 70 lines is reduced to only one line.

MMVision C100(1_0_1_3_M2_cmdInfo_M2_poseInfo_M2_custInfo)

Figure 1.1 Changes from the previous communication command program

As shown in Table 1.1, the sample library provides reliable commands that lower the hurdle to implementation and help reduce design and adjustment costs, enabling faster system startup.

In addition, a calibration program is also included in this sample library.

By simply setting the starting position for calibration, auto calibration can be performed.

Table 1.1 Comparison of the sample library before and after the release

Item	Before release	After release
Number of command lines	20 lines to 100 lines	1 line
Program creation time	Long (several hours to several days)	Short (several minutes)
Robot implementation hurdle	High (requires specialized knowledge)	Low (executable with simple commands)
Robot design cost	High (requires many resources)	Low (enables efficient designs)
Robot adjustment cost	High (time-consuming)	Low (allows quick adjustment)
Robot startup time	Long (several weeks to several months)	Short (several days)

2 Sample library configuration

There are two types of sample library configurations. Please download one type from the Mitsubishi Electric FA global website. There are no differences in the operation of the sample programs contained in the sample library. The downloaded contents are shown in Figure 2.1 and Figure 2.2 below.

The first configuration separates each function into individual programs.

Operation is enabled by including only the programs related to the necessary function.

In the second configuration described later, where all functions are combined into a single program, unused functions are also included within the program, resulting in a larger file size.

For those who wish to use only the necessary functions, please download and use this configuration.

The second configuration combines all functions into a single program.

Operation is enabled by including MMFUNCALL.prg.

For those who are using this sample library for the first time, please download and use this configuration.

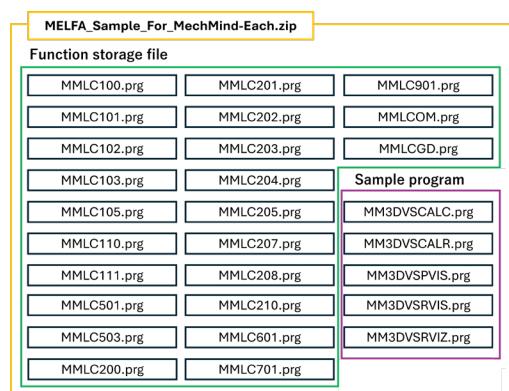


Figure 2.1 Sample library
(program configuration diagram
divided by function)

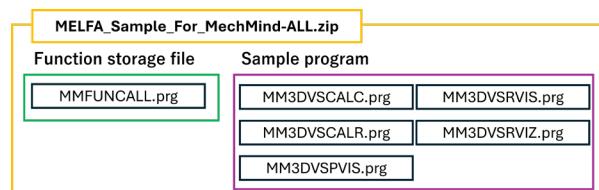


Figure 2.2 Sample library
(program configuration diagram
with all functions combined)

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■ Related information

• Mitsubishi Electric industrial/collaborative robots-MELFA sample library

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obot](https://www.mitsubishielectric.com/fa/download/software/search.page?mode=lib&kisyu=robot)>

• Mech-Mind official website

<<https://www.mech-mind.com/>>

• Mech-Mind YouTube channel

<<https://www.youtube.com/@MechMindRobotics>>

• Mech-Mind Online Community website

<<https://community.mech-mind.com/>>