

AC Variable Speed Inverter Drives Range Workshop Studio Software Guide

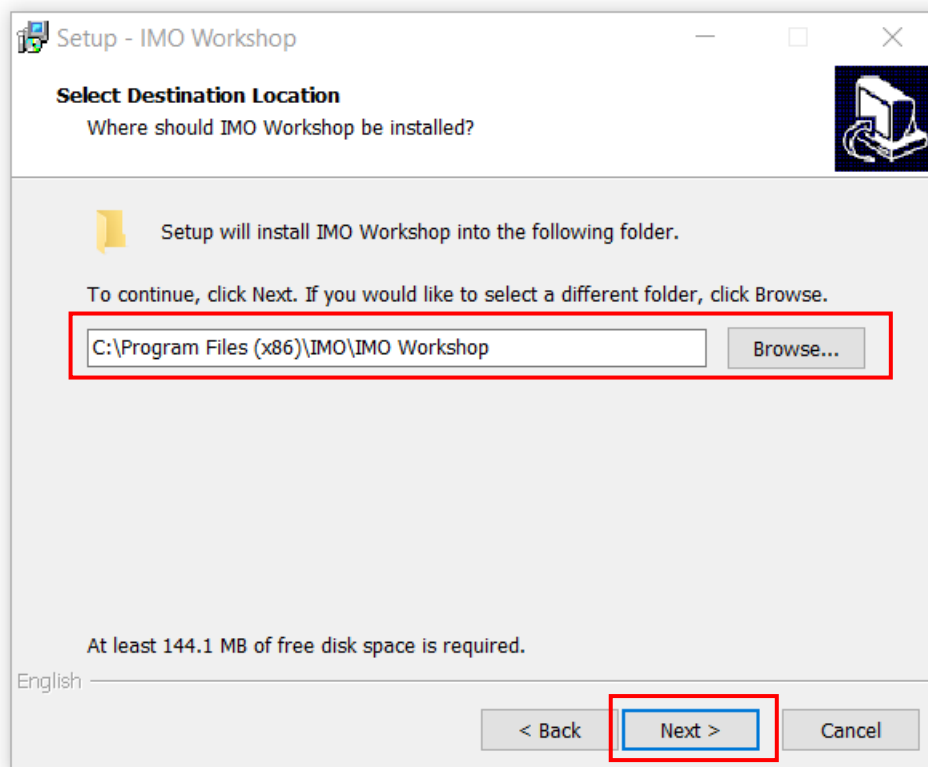
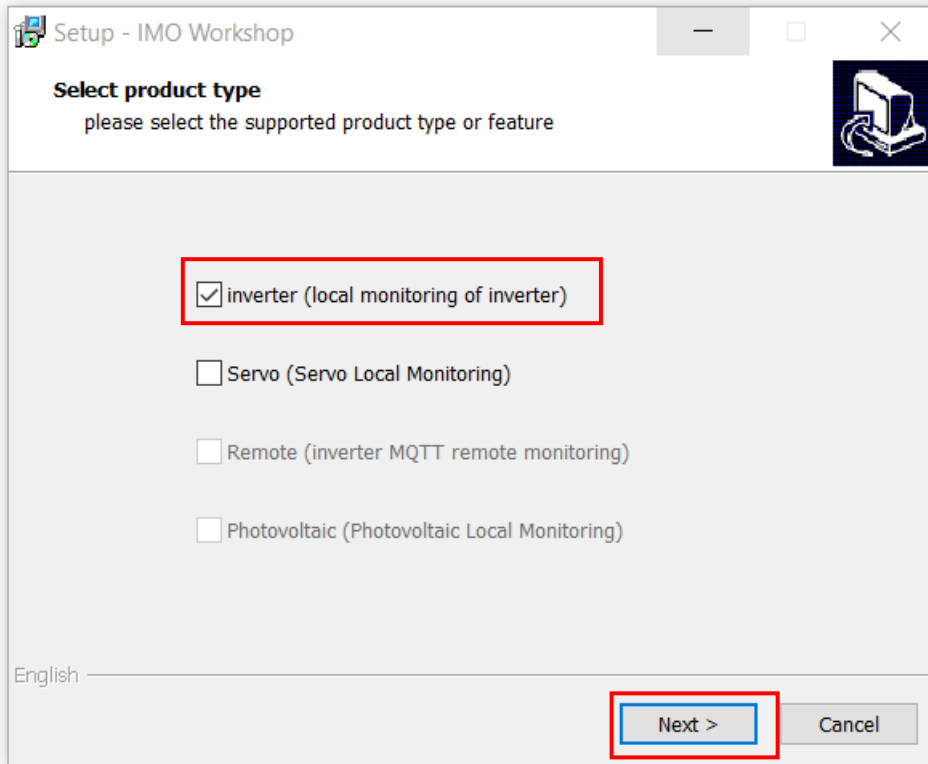


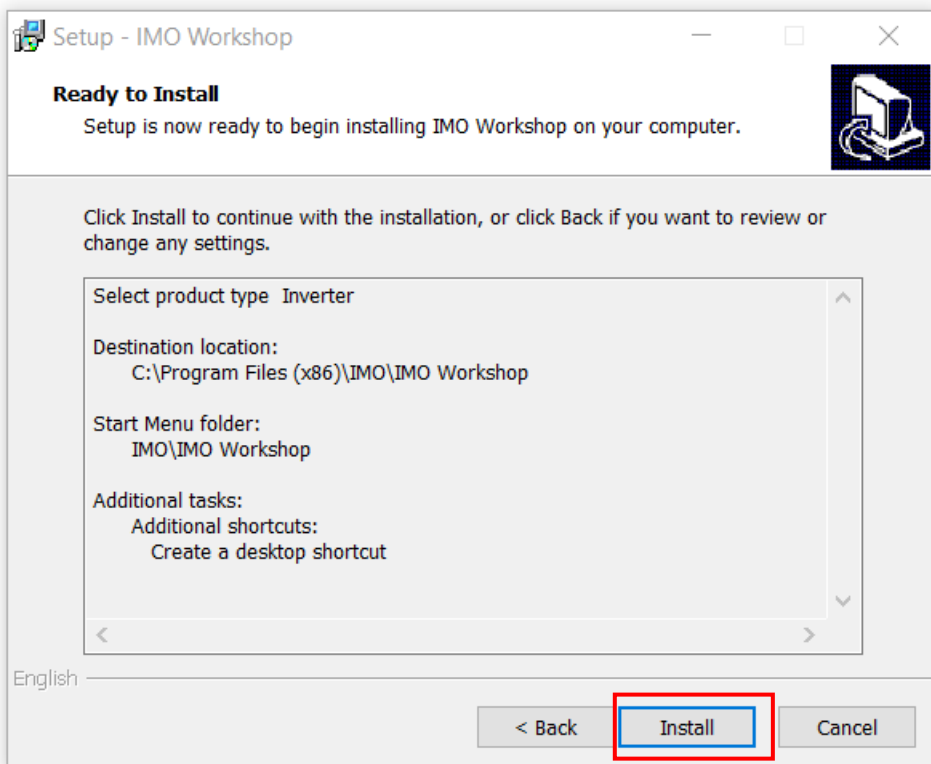
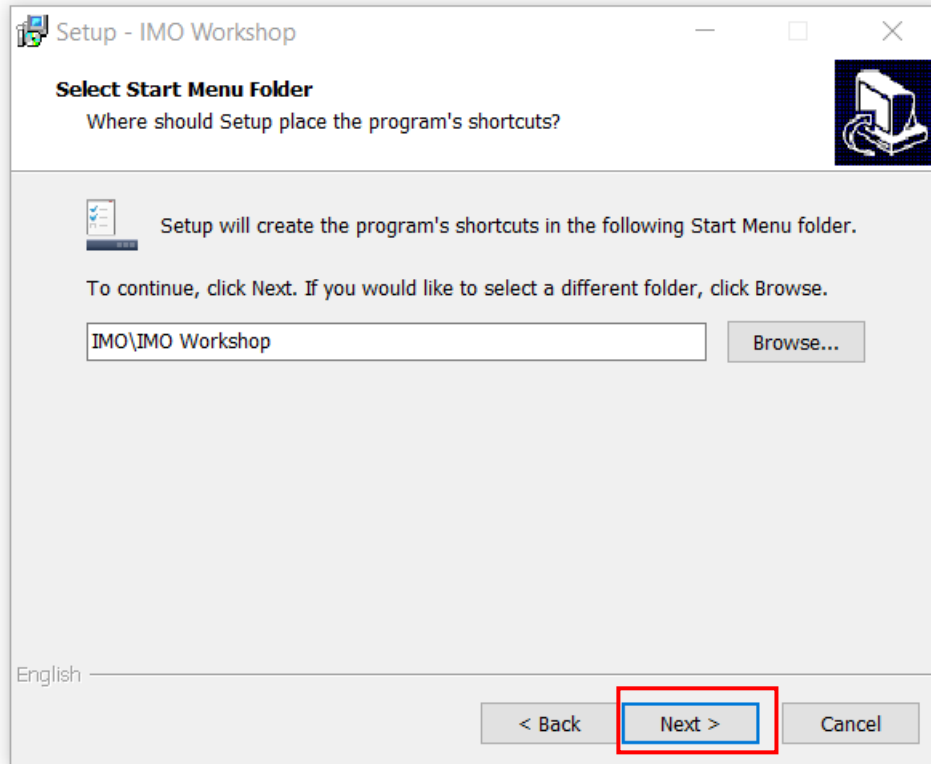
IMO Workshop Studio Software Guide

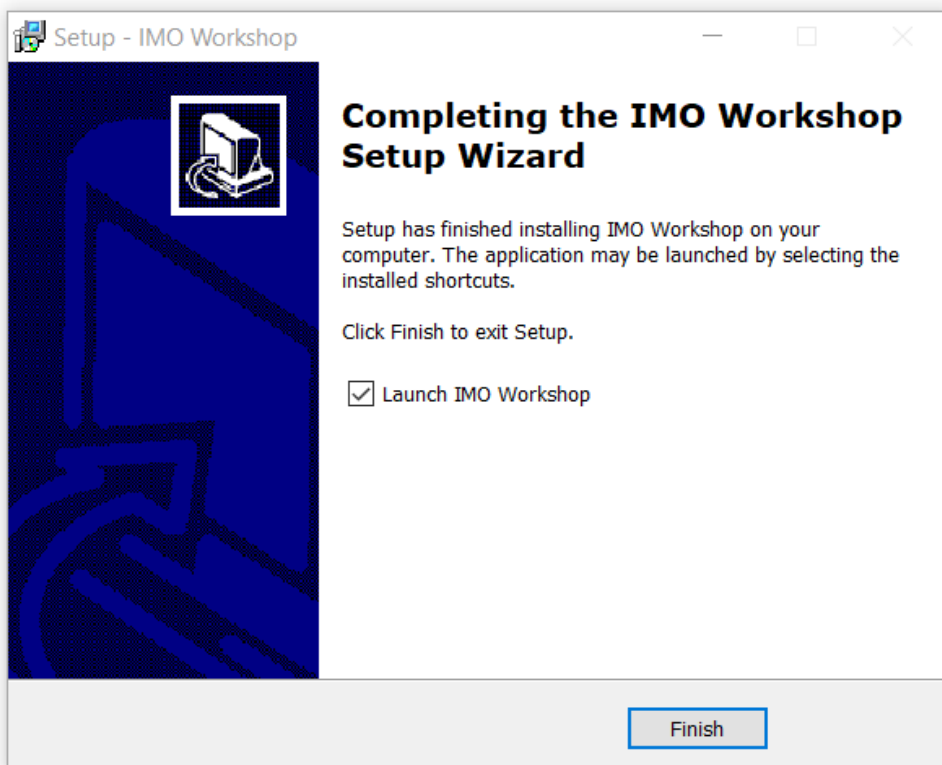
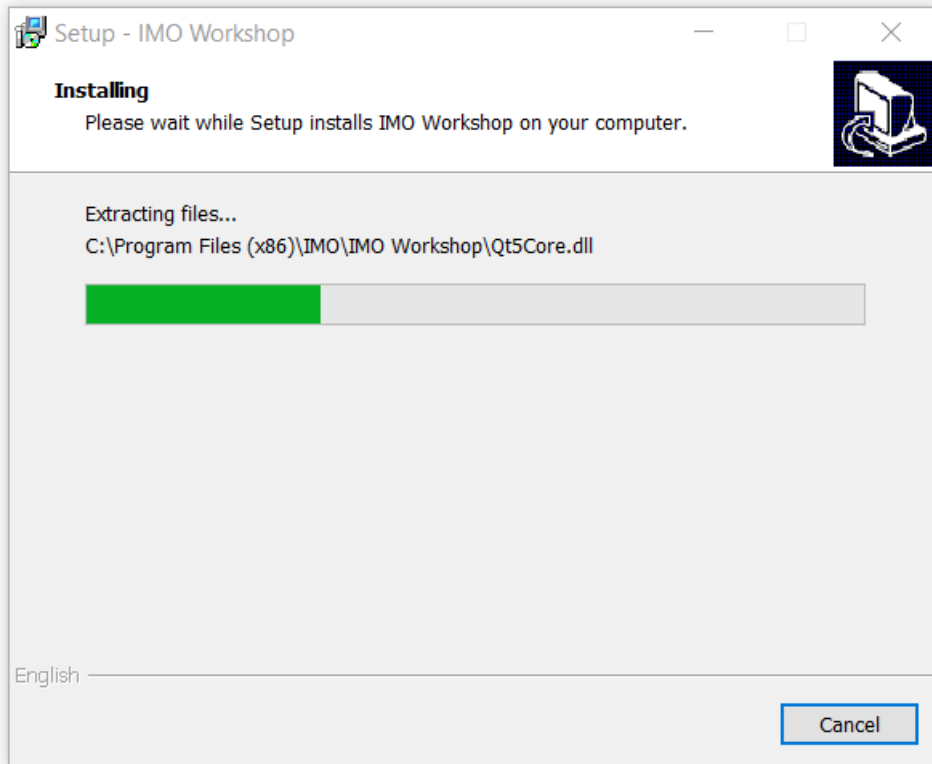
The IMO Workshop Studio Software is a PC based solution to easily program, commission, and troubleshoot IMO inverters such as XKL, SD1, HD2, and HD2IP series. The software is available in the IMO website.

1. Software Installation

- The software can be downloaded in a zip file format from the IMO website.
- Unzip the downloaded file and double click on the setup file.
- Please follow the instructions below to complete the installation.

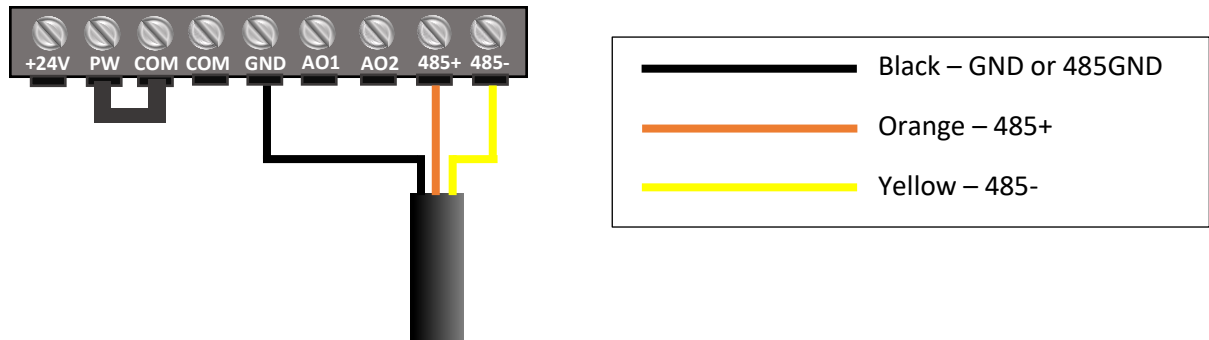






2. Communication Cable (IC-USB-RS-LPC)

The cable recommended for the communication between the software and the inverter is IC-USB-RS-LPC. The IC-USB-RS-LPC cable have three leads (Orange, Yellow, and Black) at one end, and USB A at the other end. Connect the three leads to the inverter as shown in the below diagram and USB A terminal to the PC.



3. Serial Communication (via IC-USB-RS-LPC)

- Open the IMO workshop Studio software and click on “New project”.



- Choose the correct inverter model and select communication as COM, as shown in the below image. Configure the COM settings (serial communication), the same as that configured in the inverter. Below are the related parameters in the inverter.
 - Parity bit: P14.02 parameter (Default value: Even parity)
 - Baud rate: P14.01 parameter(Default value: 19200BPS)

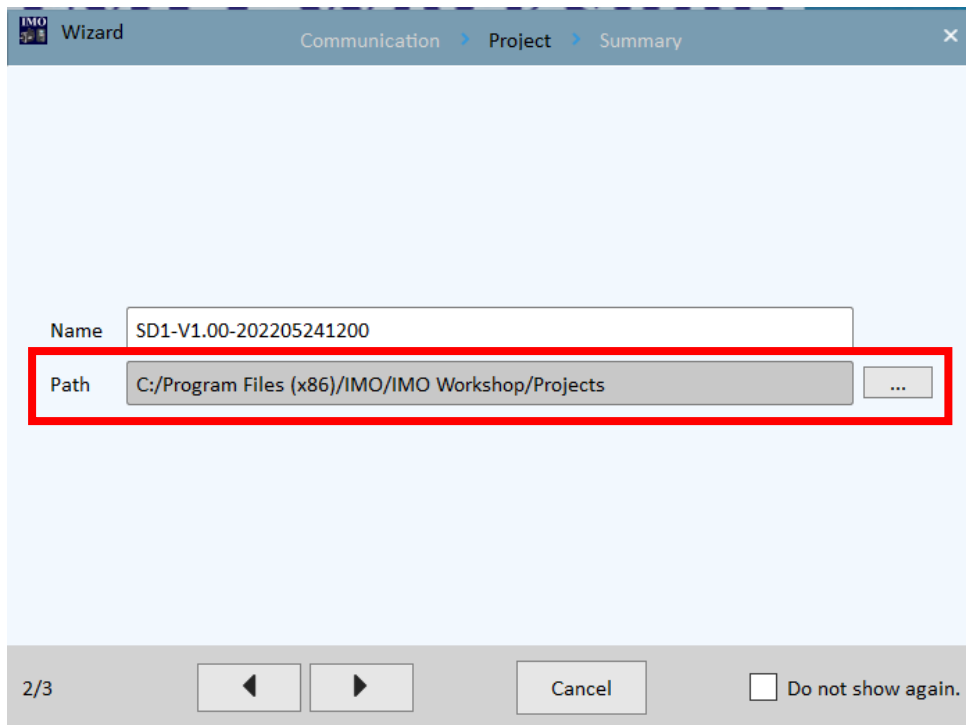
The image shows a 'Wizard' dialog box with the following configuration:

Device info	
Model	SD1
Version	V1.00
Industry	/
Name	SD1-V1.00-1
Communication	COM

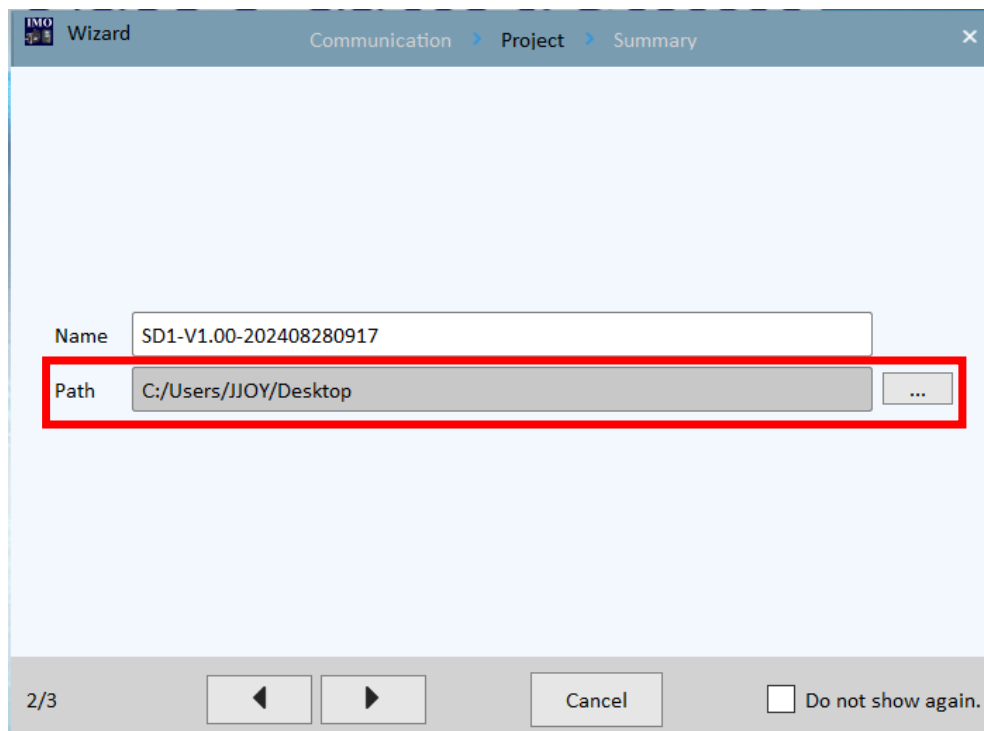
Communication type	
Start address	1
End address	2
Port	COM4
Baud rate	19200
Parity bit	Even parity
Data bit	8
Stop bit	1
<input checked="" type="radio"/> Single <input type="radio"/> Multiple	

At the bottom of the dialog, there are navigation buttons: a left arrow, a right arrow, a 'Cancel' button, and a checkbox labeled 'Do not show again.' The page indicator '1/3' is visible in the bottom left corner.

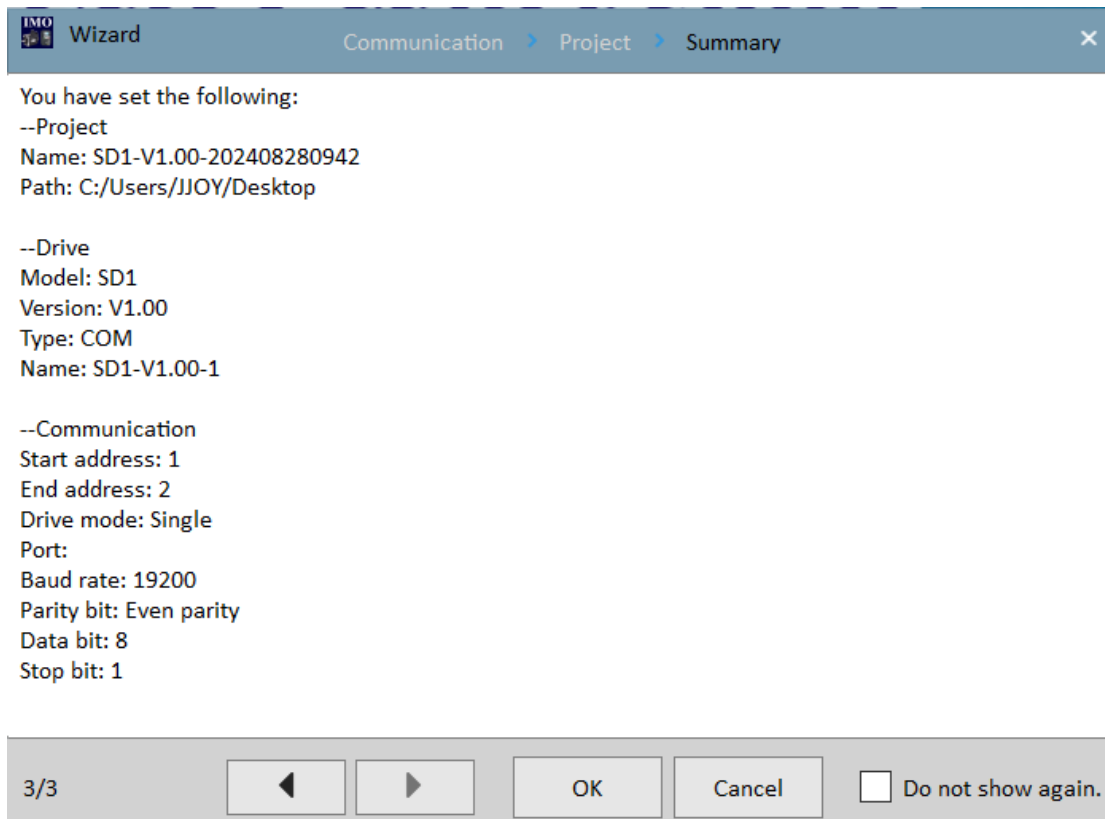
- Create a file name, select a path for the project, and press the next button.



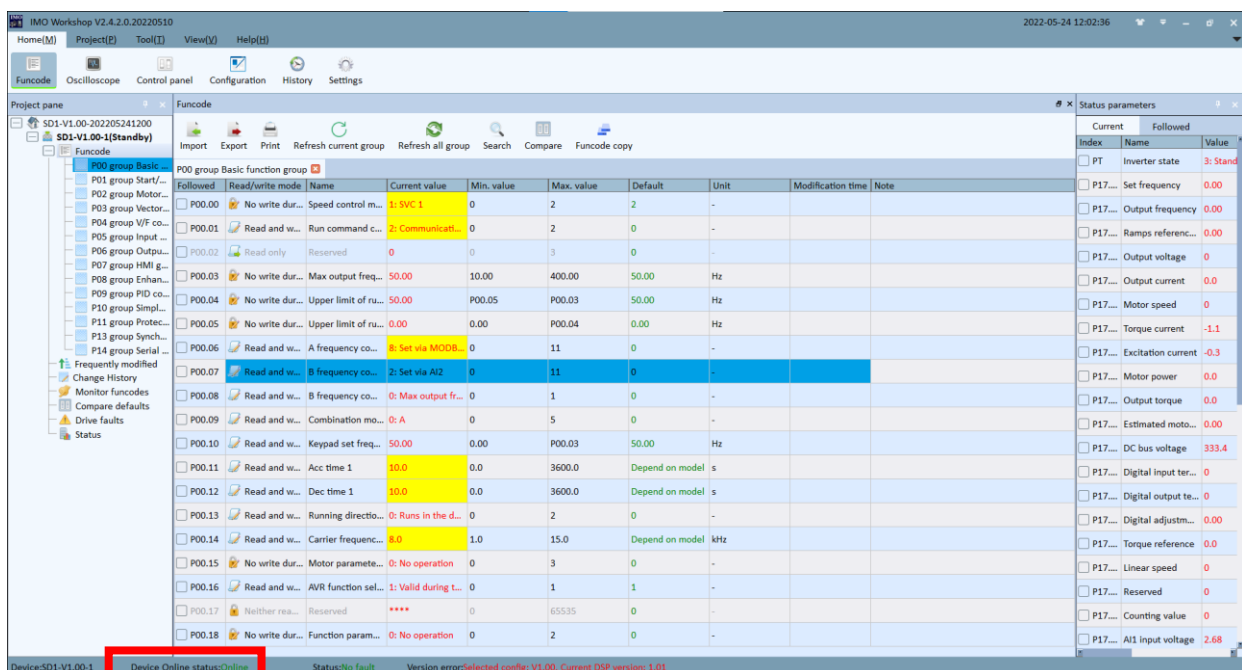
- Change the path to any folder directory outside the “Program Files” folder.



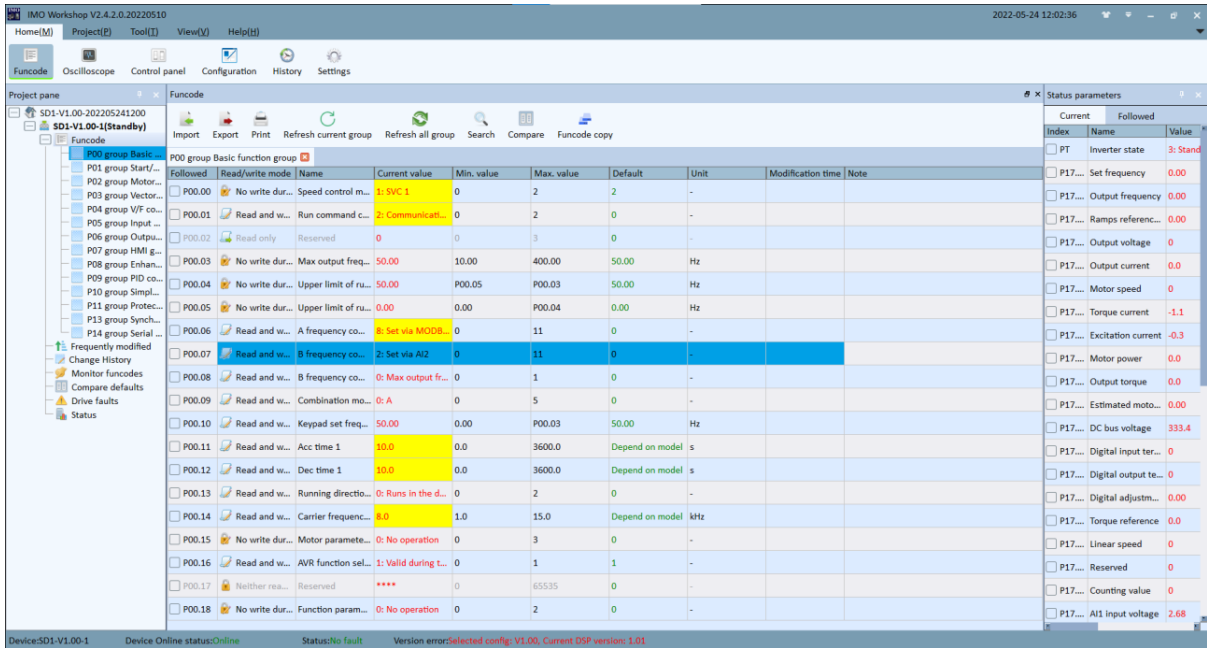
- Read the configured settings and press the “OK” button.



- Check the device's online status. If it is showing Online, then the software is ready to use, and communication is established.



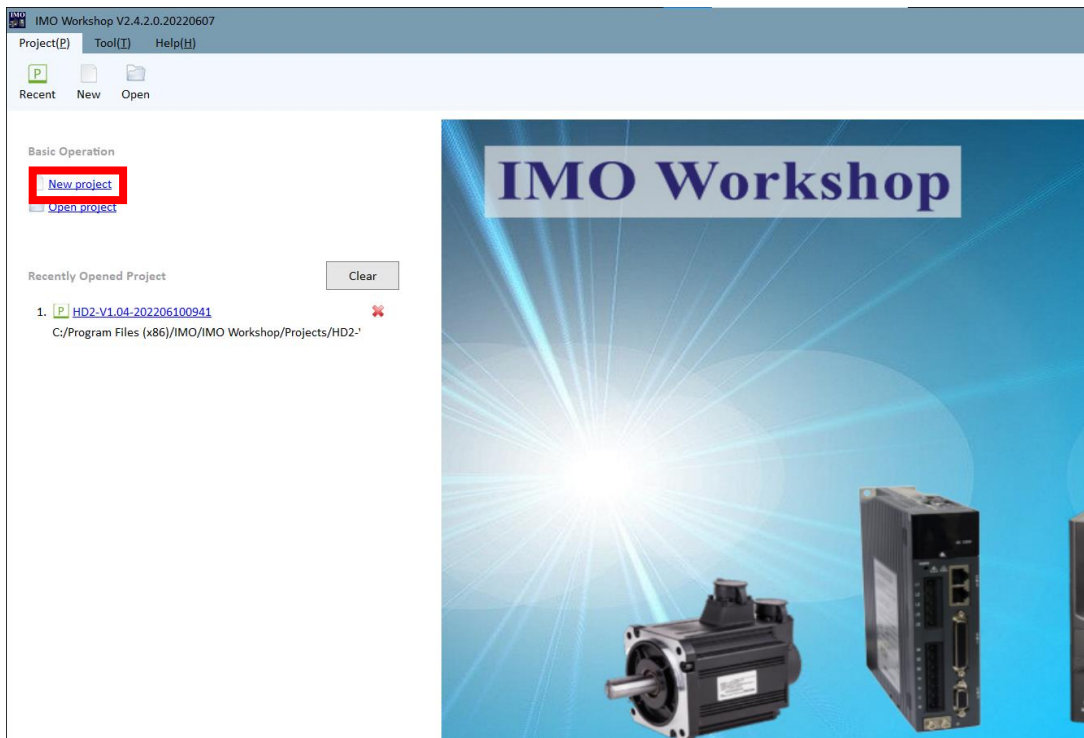
- Select the parameter to modify and press the enter button. The modified parameters will be highlighted in yellow colour.



Note: The settings used to communicate with Workshop via the COM port are the same as those used for a Modbus Master (RTU) device to communicate with the drive. You cannot have both Workshop and a Modbus device communicating with the drive over a serial network at the same time; one would need to be disconnected.

4. Ethernet Communication (via HD2-E-ENET and HD2-E-MTCP)

- Open the IMO workshop studio software and create a new project.



- Select the model and communication type as shown in the figure below. If using the HD2-E-ENET card, choose the communication type as UDP and configure the IP address to match that of the inverter (P16.02 to P16.13). If using the HD2-E-MTCP card, choose the communication type as Modbus_TCP and configure the IP address using the P16.58 to P16.69 parameters.

Wizard Communication > Project > Summary

Device info

Model HD2 Version V3.02 Industry /

Name HD2-V3.02-1 Communication UDP

Communication type

Start address 192 · 168 · 0 · 1 End address 192 · 168 · 0 · 2

Data port 100 OSC port 101

Single Multiple

1/3 < > Cancel Do not show again.

- Select an appropriate path to save the project and press next.

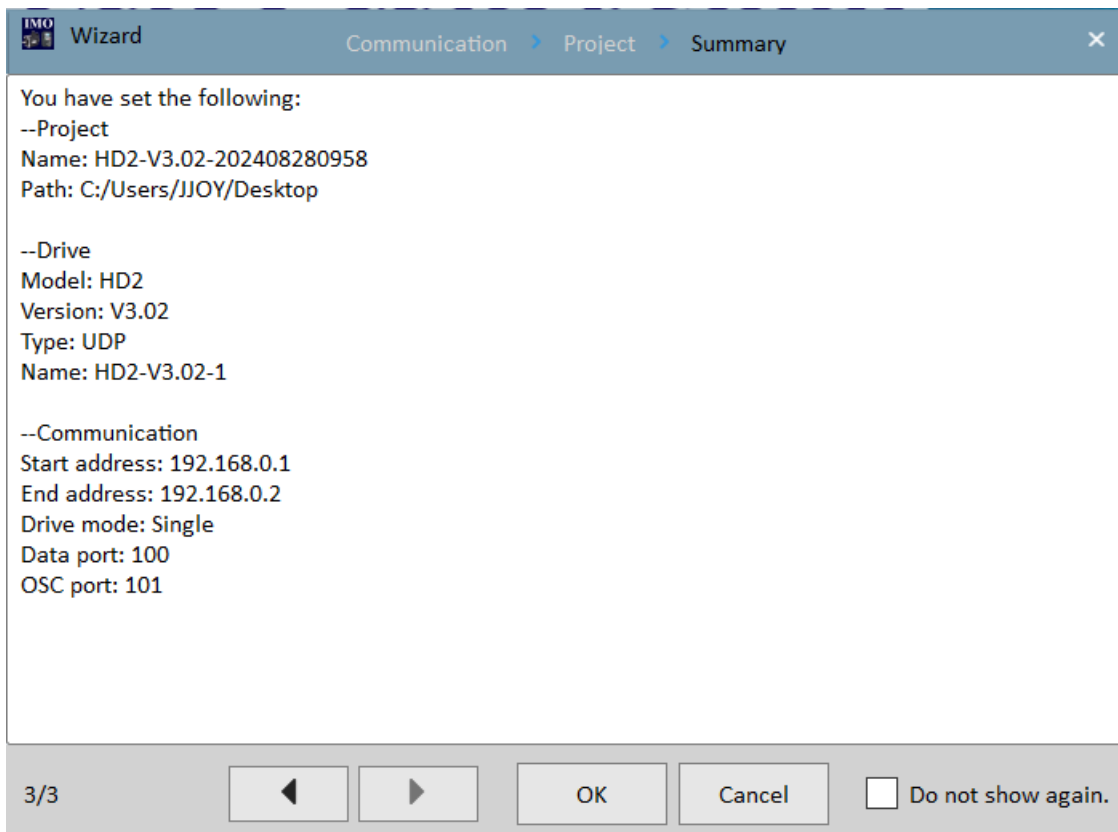
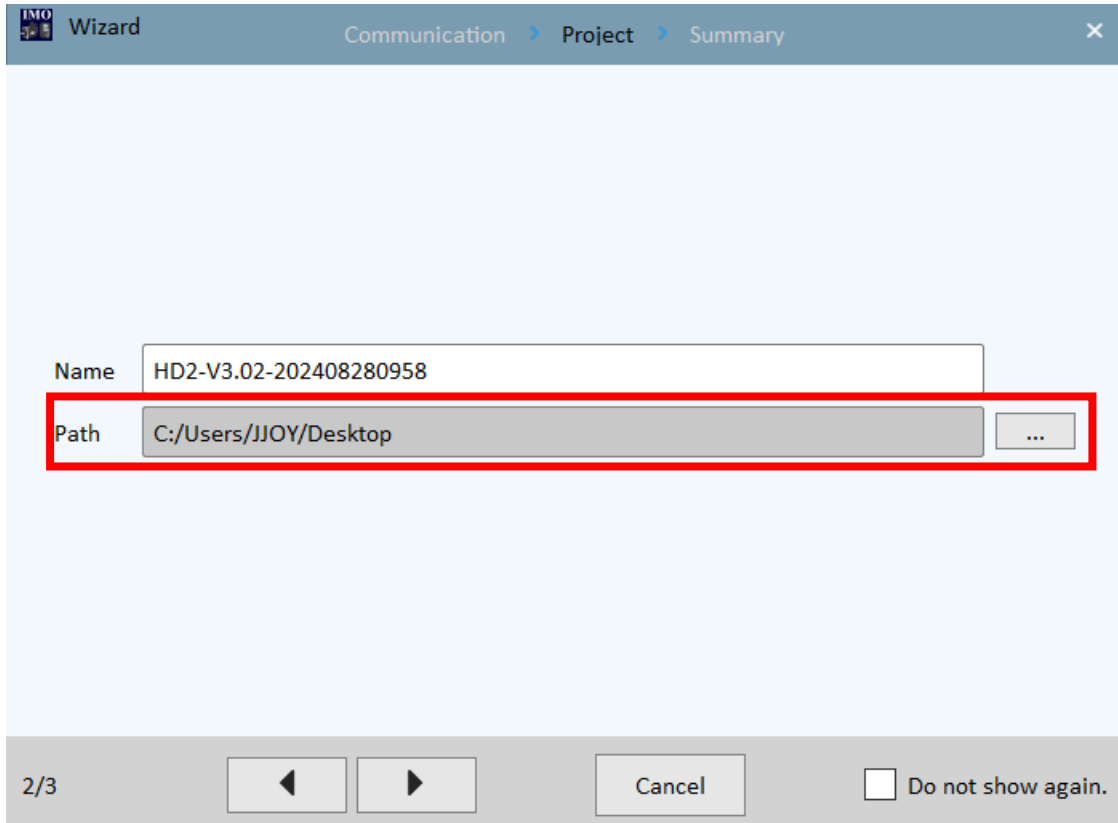
Wizard Communication > Project > Summary

Name HD2-V3.02-202304120910

Path C:/Program Files (x86)/IMO/IMO Workshop/Projects

2/3 < > Cancel Do not show again.

- Change the path to any folder directory outside the “Program Files” folder.



- If there is a communication between the inverter and software, then the device status at the bottom will be “online”.

The screenshot displays the IMO Workshop V2.4.2.0.20220607 software interface. The main window is titled 'Funcode' and shows a list of parameters for the 'P00 Group Basic Function'. The parameters are organized into columns: 'Followed', 'Read/write mode', 'Name', 'Current value', 'Min. value', 'Max. value', 'Default', and 'Unit'. The 'Current value' column shows various values, including '2: Communication', '2: Ethernet', '50.00', '0.00', '0: Set via keypad', '2: Set via AI2', '0: Max. output frequency', '0: A', '15.00', '10.0', '0.0', '0: Run in default direction', '8.0', '0: No operation', '1: Valid during the whole process', '0: G', and '0: No operation'. The 'Status parameters' table on the right shows the current and followed values for various parameters, such as 'Status of inverter' (3: Standby), 'Set frequency' (15.00), 'Output frequency' (0.00), 'Output voltage' (0), 'Output current' (0.0), 'Motor speed' (0), 'Torque current' (0.0), 'Exciting current' (0.0), 'Motor power' (0.0), 'Motor output to...' (0.0), 'Estimated moto...' (0.00), 'DC bus voltage' (593.4), 'Digital input ter...' (0), 'Digital output te...' (0), 'Digital adjustm...' (0.00), 'Torque referenc...' (20.0), 'Linear speed' (0), 'Reserved variab...' (0), 'Count value' (0), and 'All input voltage' (0.00).

At the bottom of the interface, the 'Device:HD2-V1.04-' status bar is visible. A red box highlights the text 'Device Online status:Online' and 'Status:No fault', indicating that the device is online and functioning correctly.

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