Classification:
Software Development for I-7000/M-7000 series

Question

How to access M-7026 by using DCON commands in LabVIEW?

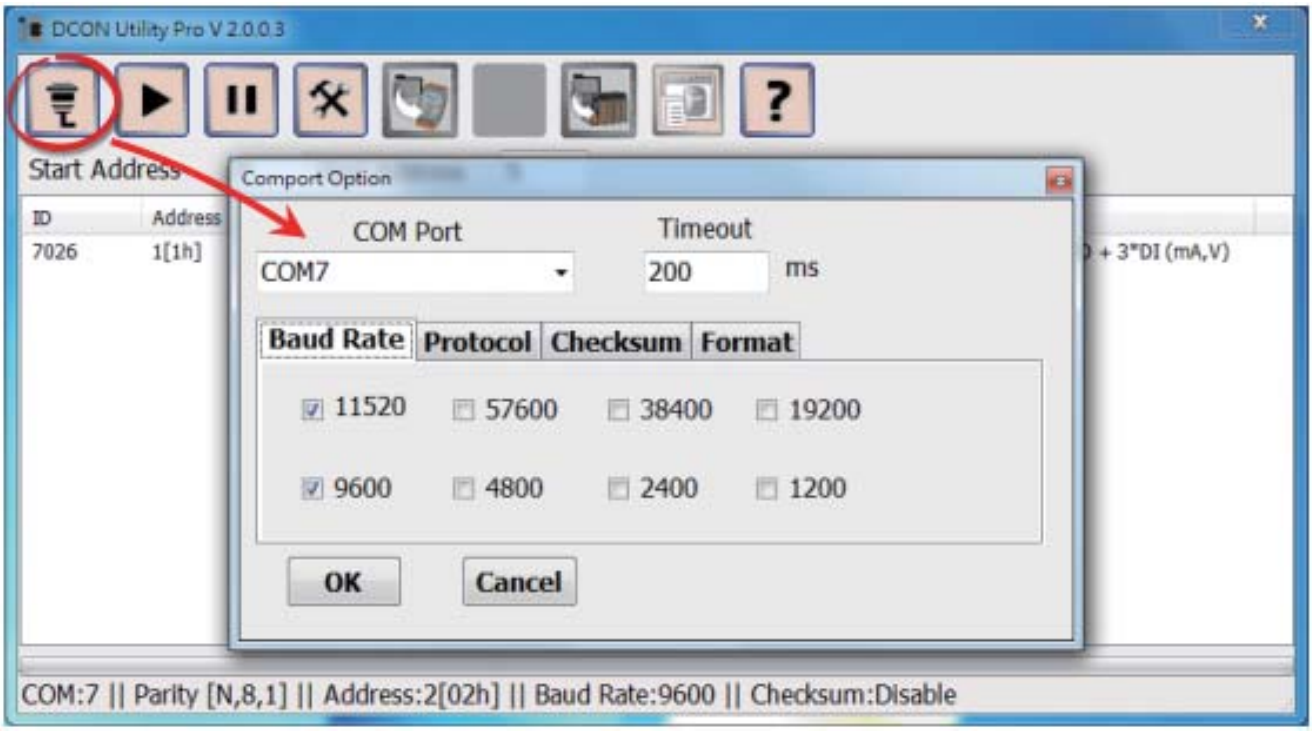
Answer

Refer to the following for a detailed description of the configuration process:

Step 1:

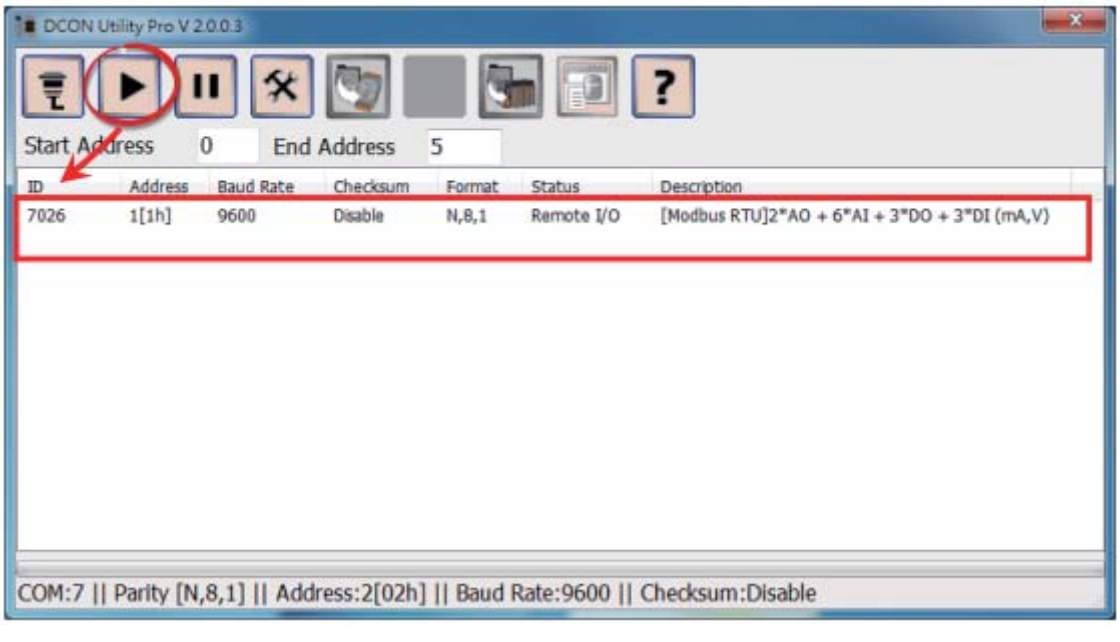
Install the DCON Utility Pro on your PC, and then run the DCON Utility Pro to set the protocol to "DCON" for the M-7026. The DCON Utility Pro can be downloaded from the ICP DAS web site:
http://www.icpdas.com/en/download/index.php?nation=US&kind1=&model=&kw=DCON+Utility+Pro

1. Click the "COM Port" button to select the COM Port that the M-7026 is connected to on the PC, then
select the appropriate Baud Rate, Protocol, Checksum and Format settings depending on the configuration of the M-7026 and click the "OK" button.

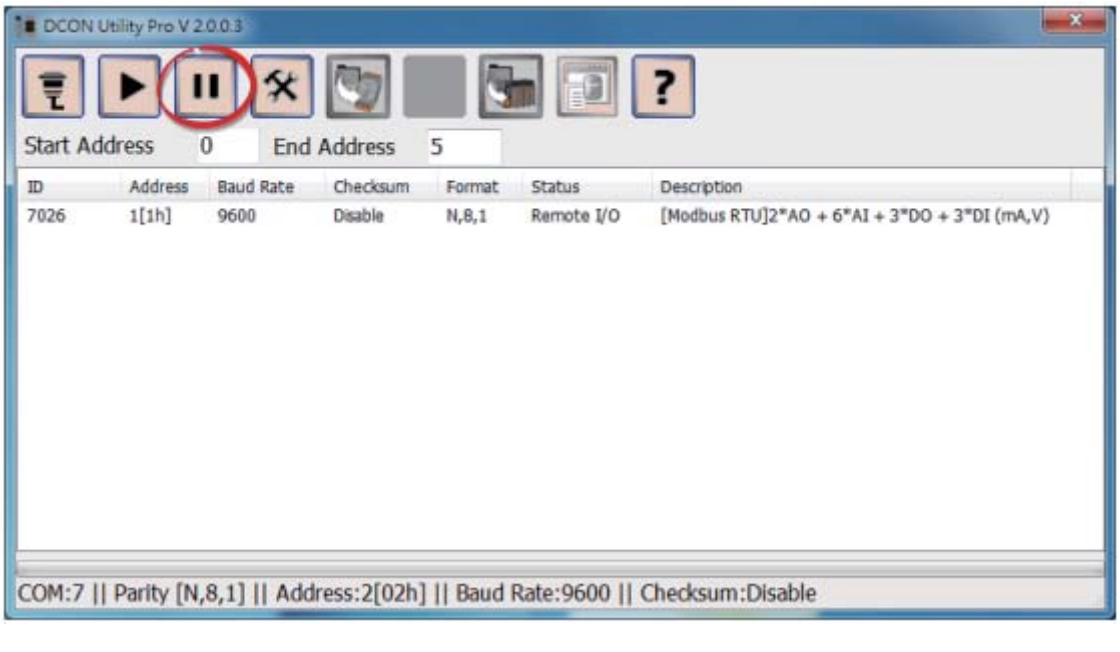


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2. Click the "Start Search" button to start searching for the M-7026, as illustrated below. Once the M-7026 is identified, it will be displayed in the search results panel of the DCON Utility Pro.

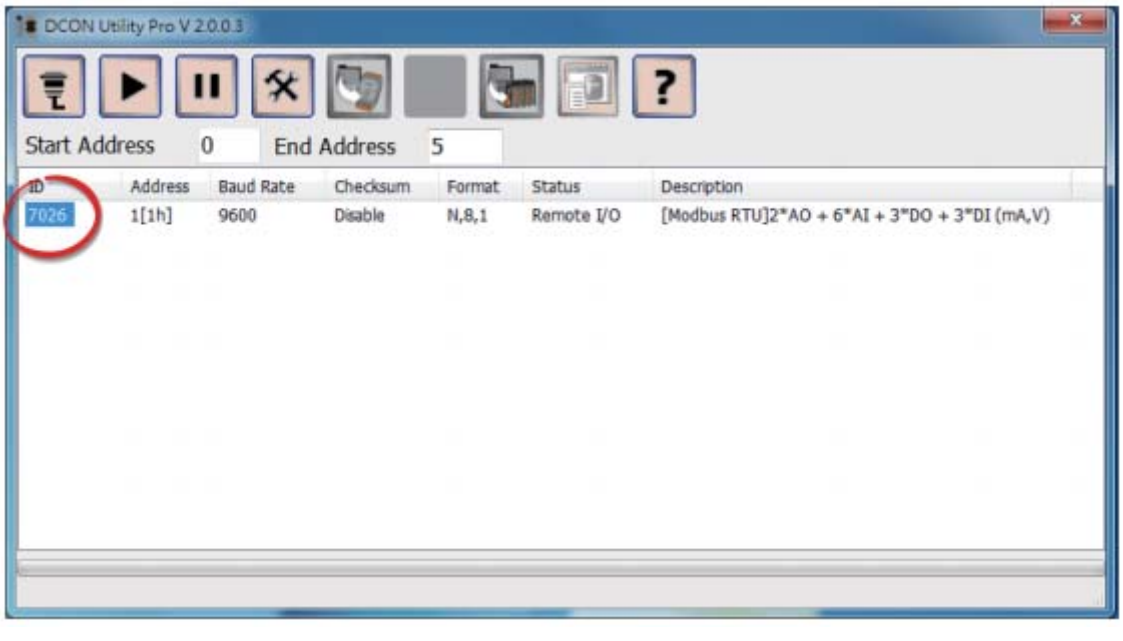


3. Click the "Stop Search" button to stop the search.

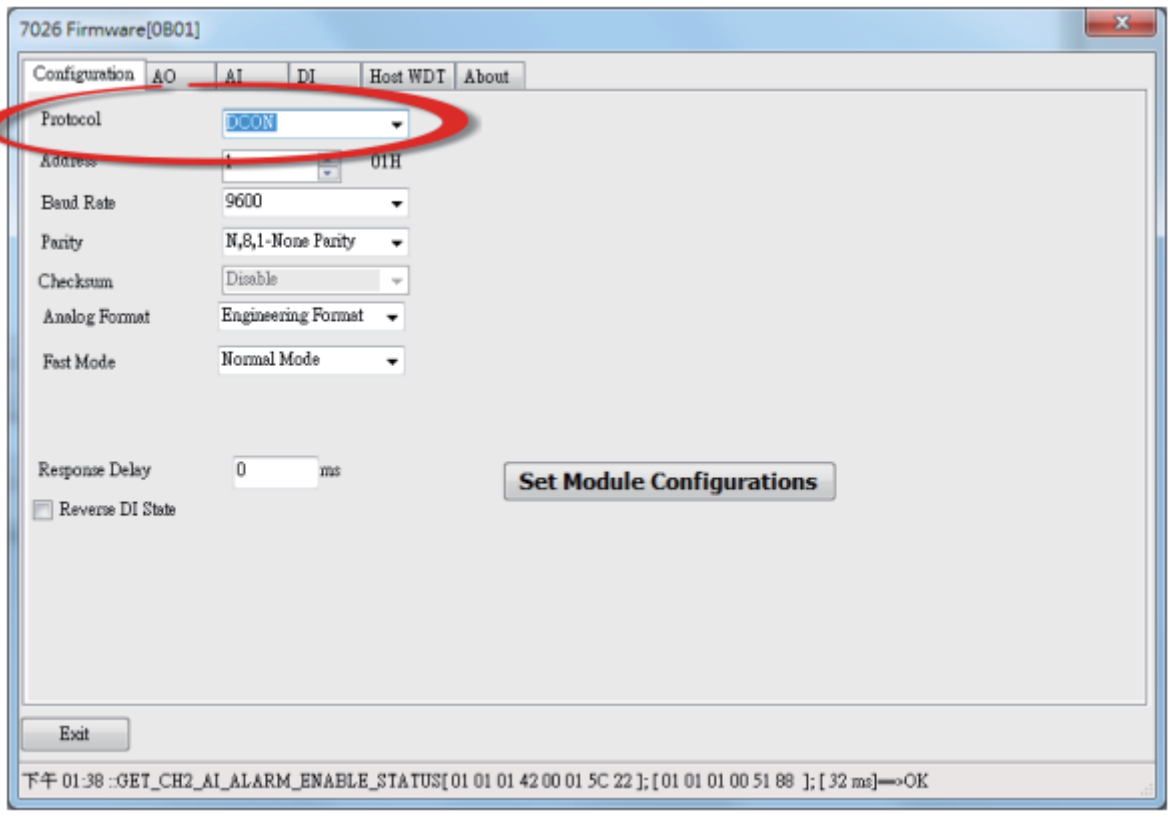


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4. Double click on the module name to open the "7026 Firmware [0B01]" dialog box.

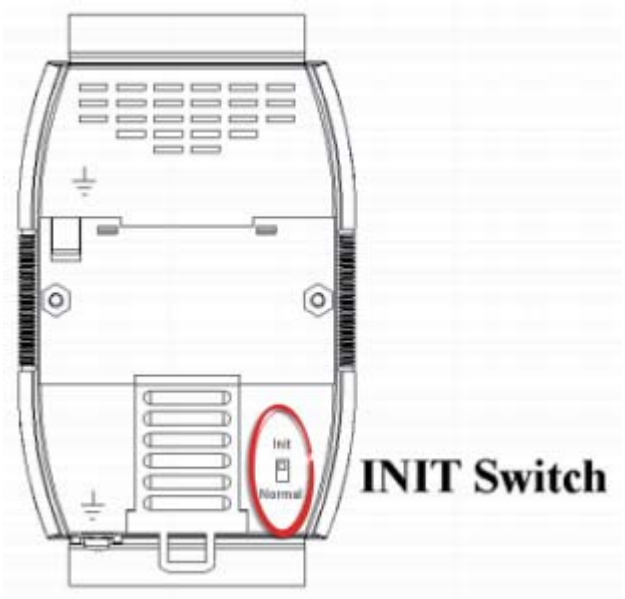


5. In the "Configuration" tab, select the "DCON" option from the "Protocol" drop down options.

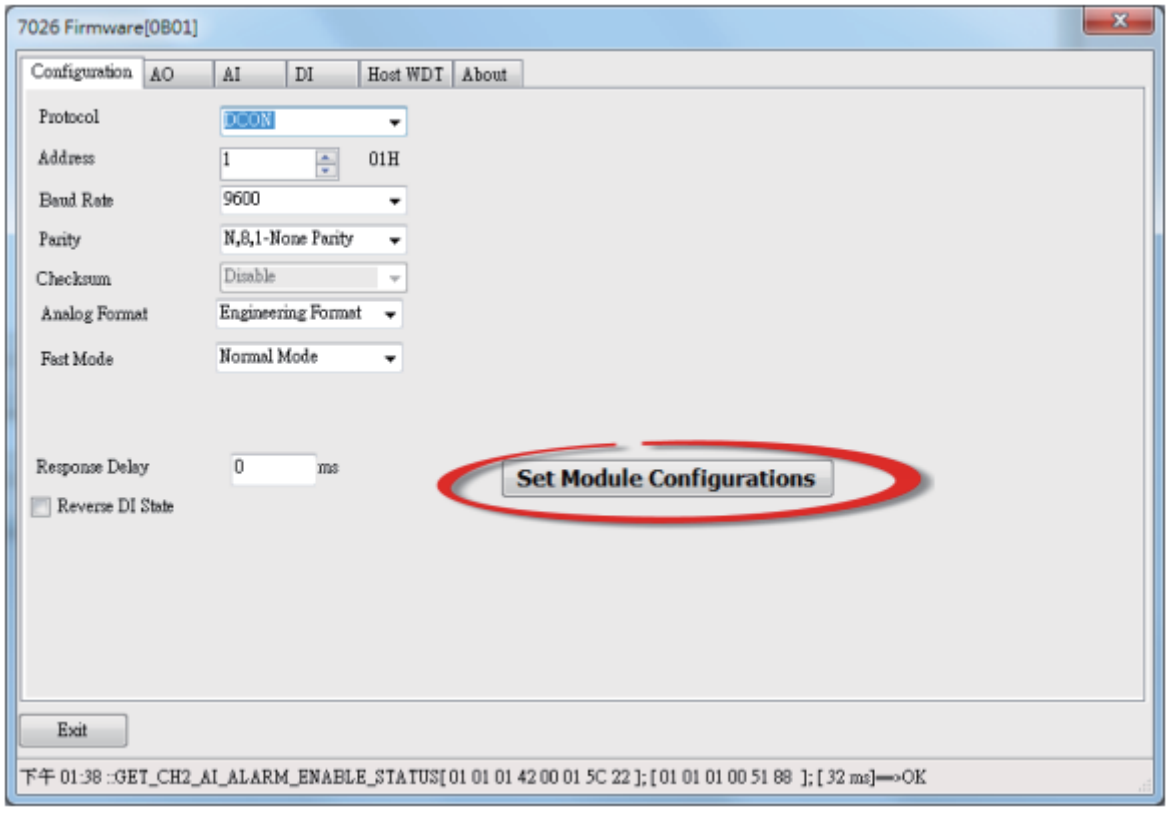


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6. Verify that the "INIT Switch" on the M-7026 is in the "Init" position.

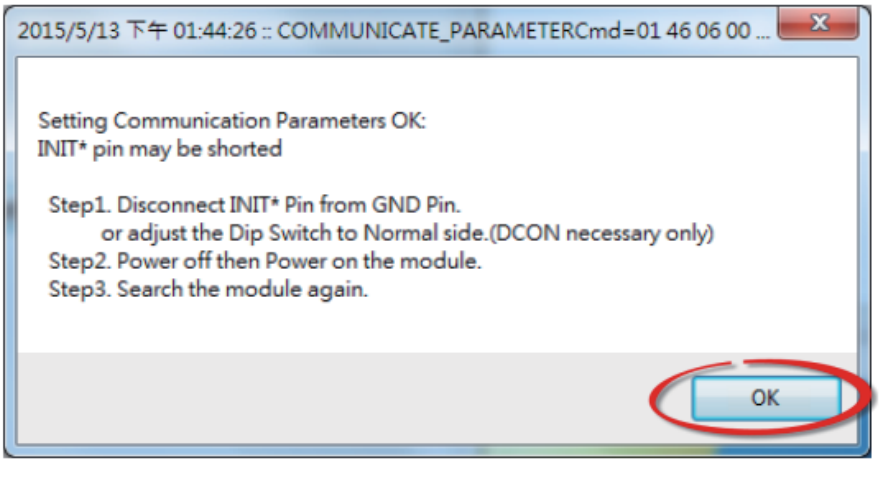


7. Click the "Set Module Configurations" button.



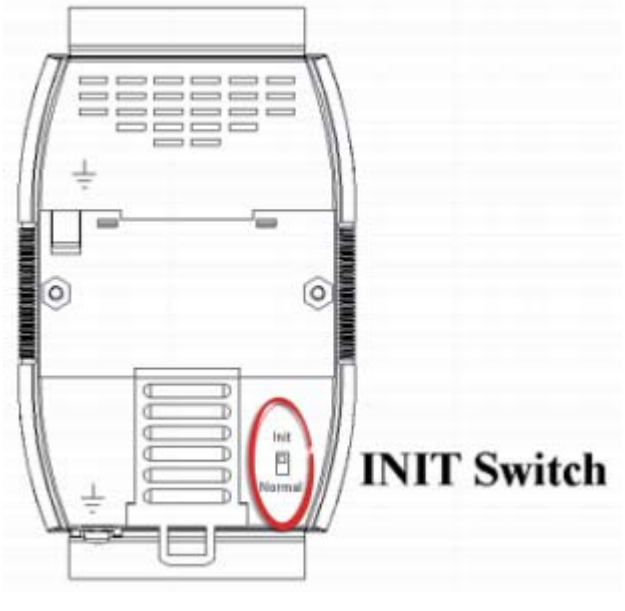
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8. A "Setting Communication Parameters OK:" dialog box will be displayed and click the "OK" button.

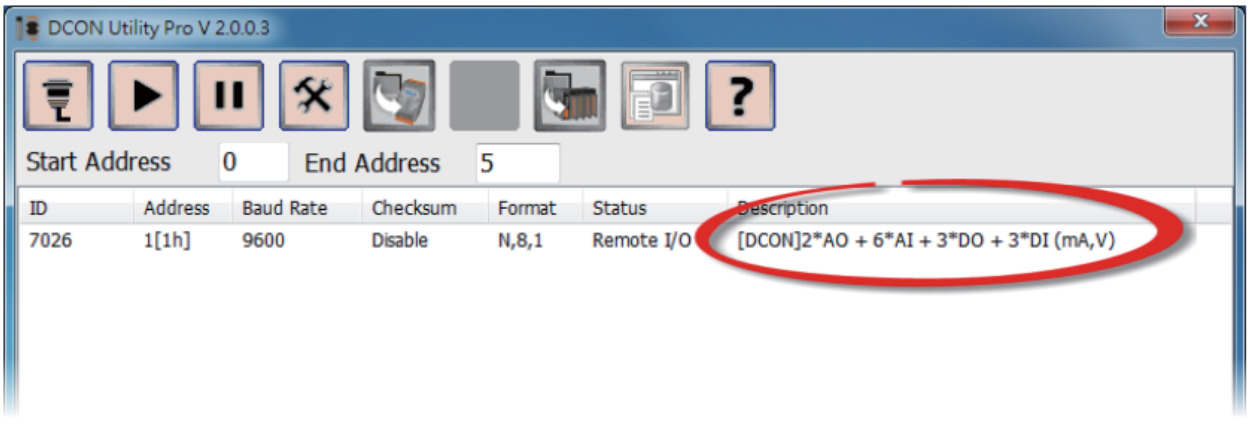


9. Set the "INIT Switch" on the M-7026 to the "Normal" position.

10. Power-on and reboot the M-7026 to operate the module in "Normal" Mode.



11. Search for the M-7026 module again. Verify the result to show "[DCON]" and then exit the DCON Utility Pro.



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Step 2:

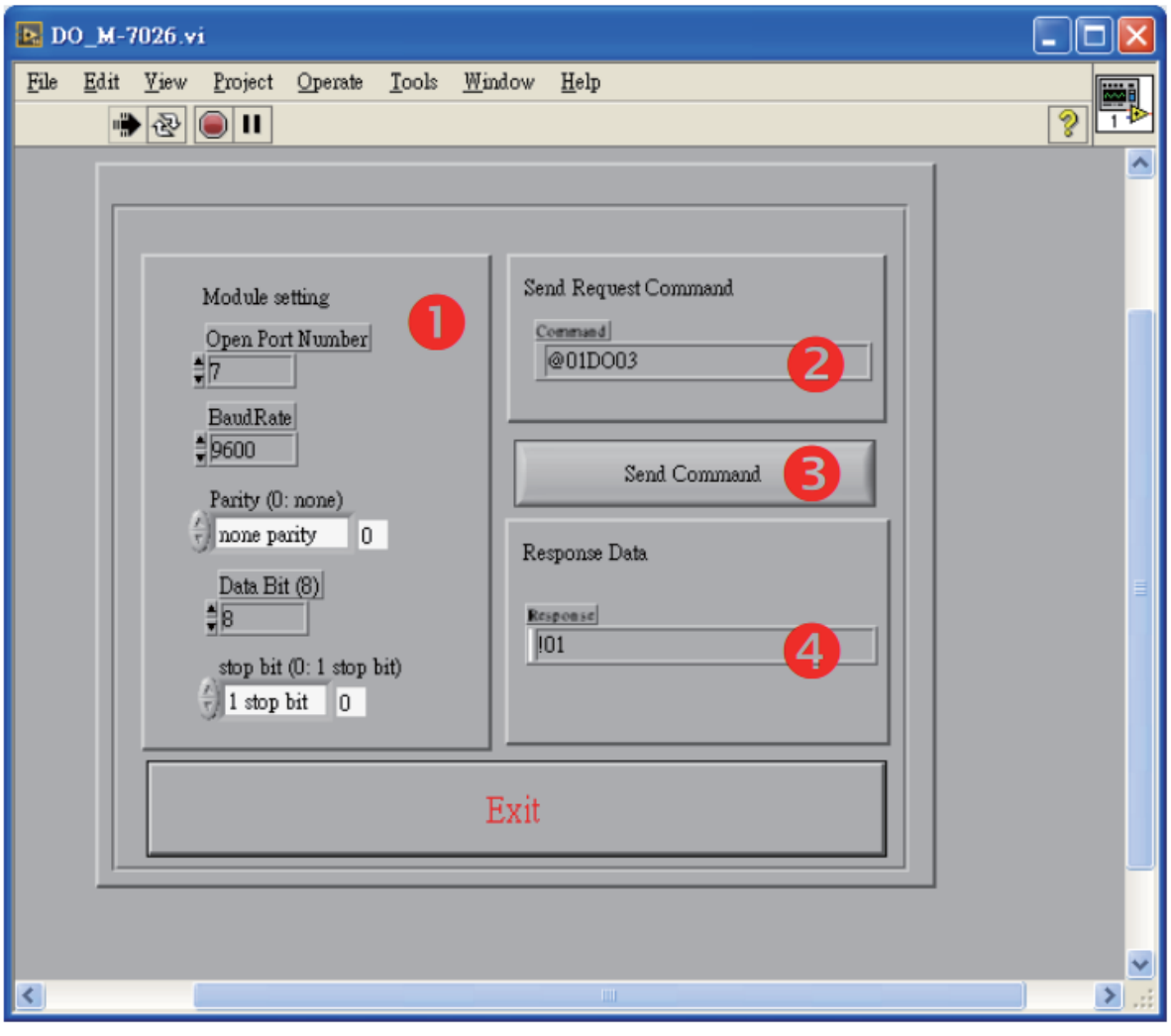
Run the sample program: **DO_M-7026.vi.**

1. Enter the **COM Port** that the M-7026 is connected to on the PC, then select the appropriate **Baud Rate, Parity, Data Bit** and Stop Bit settings depending on the configuration of the M-7026 in the "Module setting" area.

2. Enter the request command: **@01DO03** → Sets Channel DO0 and DO1 to ON.
@01DO01 → Sets Channel DO0 to ON.
@01DO03 → Sets Channel DO0 and DO1 to ON.
@01DO07 → Sets Channel DO0, DO1 and DO2 to ON.

3. Click the **"Send Command"** button.

4. Check the response data: **!01** → Successful

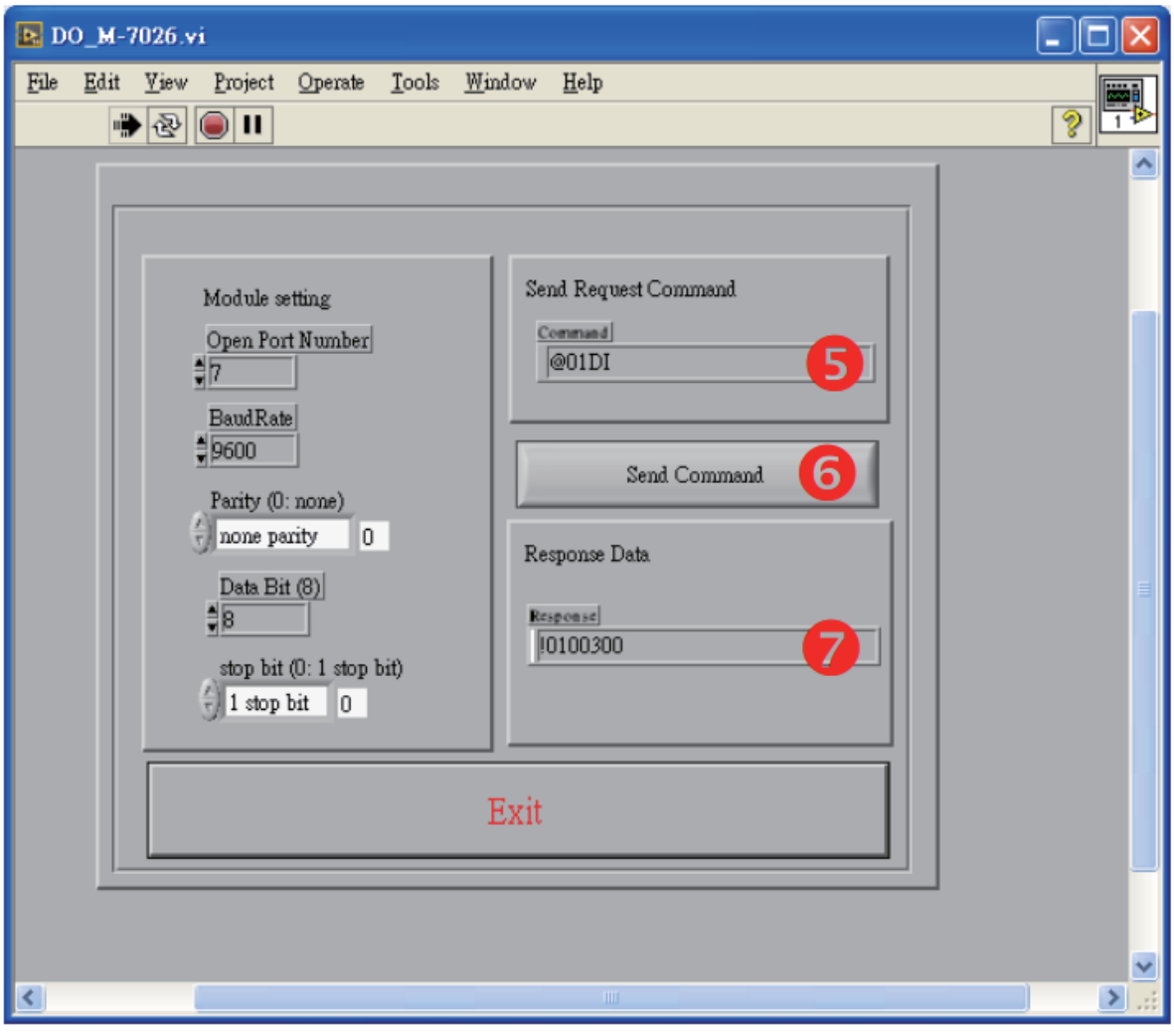


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5. Enter the request command: **@01DI** → Read status.

6. Click the **"Send Command"** button.

7. Check the response data: **!0100300** → DO Read back.



Note: For detailed information regarding DCON protocol command, refer to Chapter 2 "DCON Protocol" in the user manual of the M-7026.
The user manual location:
http://www.icpdas.com/web/product/download/io_and_unit/rs-485/document/manual/7000/M-7026_en.pdf

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