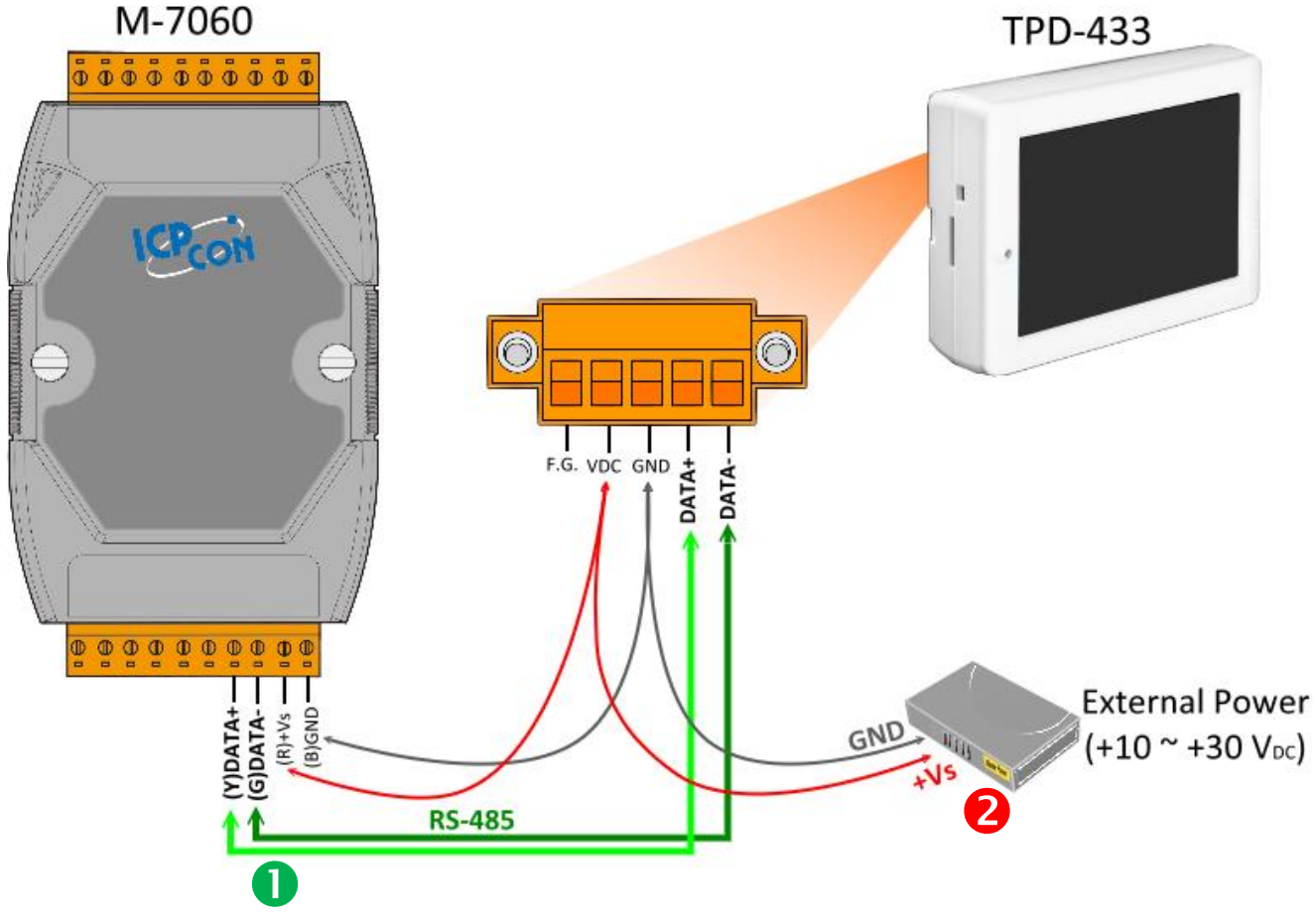
分類/Classification	☐ tDS ☐ tGW ☐ PETL/tET/tPET ☐ DS/PDS/PPDS ☐ tM-752N ☐ I/O Card ☐ VXC Card ☐ VxComm ☑ Other (TouchPAD)				
作者/Author	Tammy	日期/Date	2015-06-26	編號/NO.	FAQ016

Q: How can the M-7060 be accessed using a TouchPAD?

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

Step 1: Connect the M-7060 module to the TouchPAD model (e.g., TPD-433) on COM1 (RS-485 bus).
Step 2: Apply power to the M-7060 module and TouchPAD model (e.g., TPD-433). The valid power voltage range is from **+10 to +30 V_{DC}**.

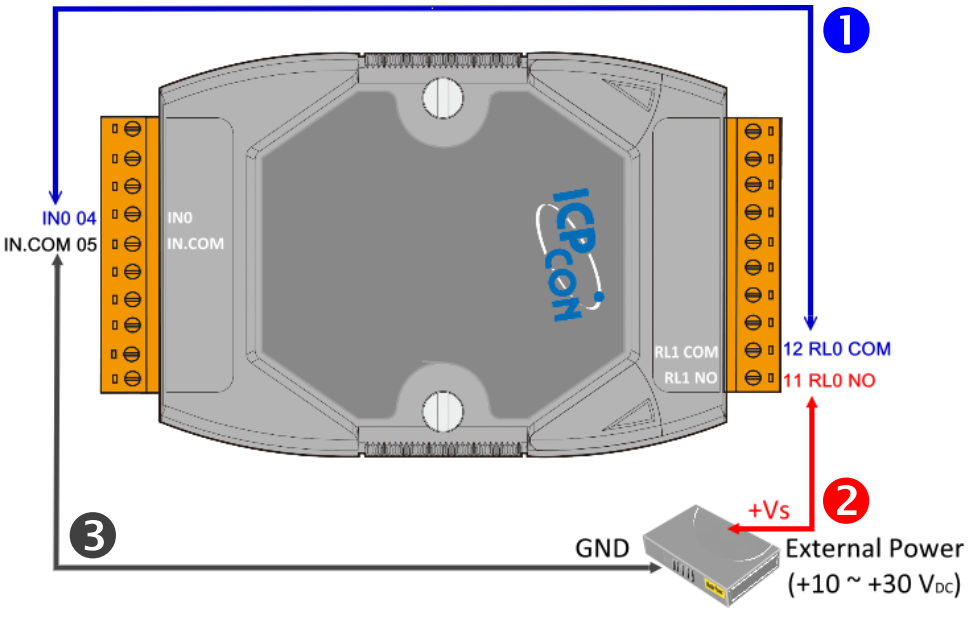


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Step 3: To perform a self-test, **connect the DO0 and DI0 pins** on the M-7060 module using the following method:

1. Connect the **RL0 COM pin** to the **IN0 pin**. (i.e., connect **Pin12** to **Pin04**).
2. Connect the **+10 V External Power** supply to the **RL0 NO pin**.
   (i.e., connect the **External + 10 V** to **Pin11**)
3. Connect the **GND pin on the External Power** supply to the **IN.COM pin**.
   (i.e., connect the **External GND** to **Pin05**)



Step 4: Install the **HMIWorks** driver, which can be obtained from either the companion CD-ROM or from the ICPDAS website, as indicated below:

	CD:\NAPDOS\TouchPAD\Setup\
	http://ftp.icpdas.com/pub/cd/touchpad/setup/

1. Double-click the **"HMIWorks_STD_vxxx_setup.exe"** file icon to execute the driver installation program.



2. Once the driver installation is complete, double-click the **"HMIWorks_STD_vxxx_Update_xx.exe"** file icon to execute the driver installation update program.

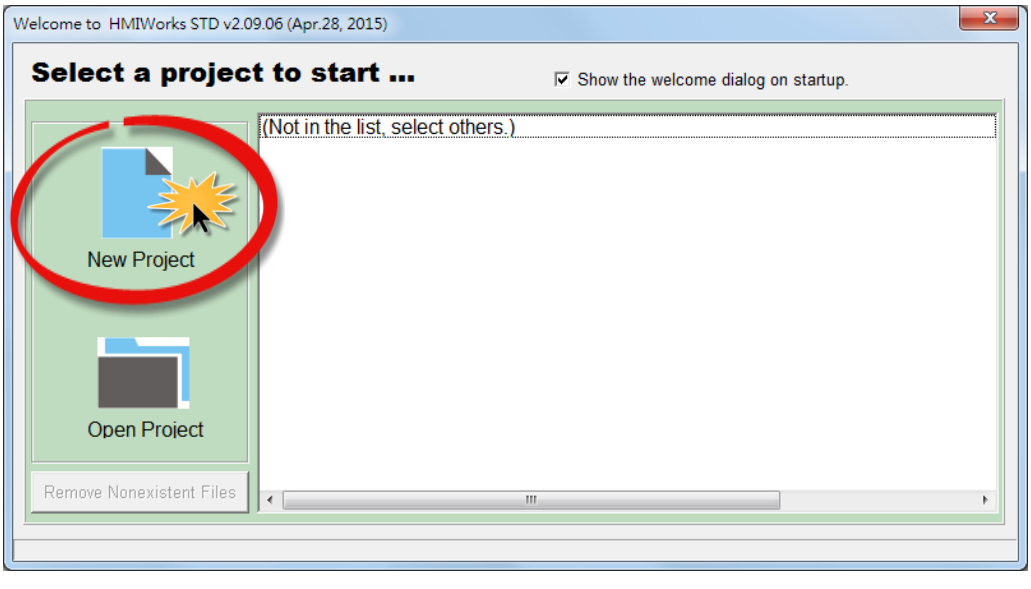


For more detailed information related to the driver installation, refer to Chapter 2 "Software Installation" in the TouchPAD Getting Started document.

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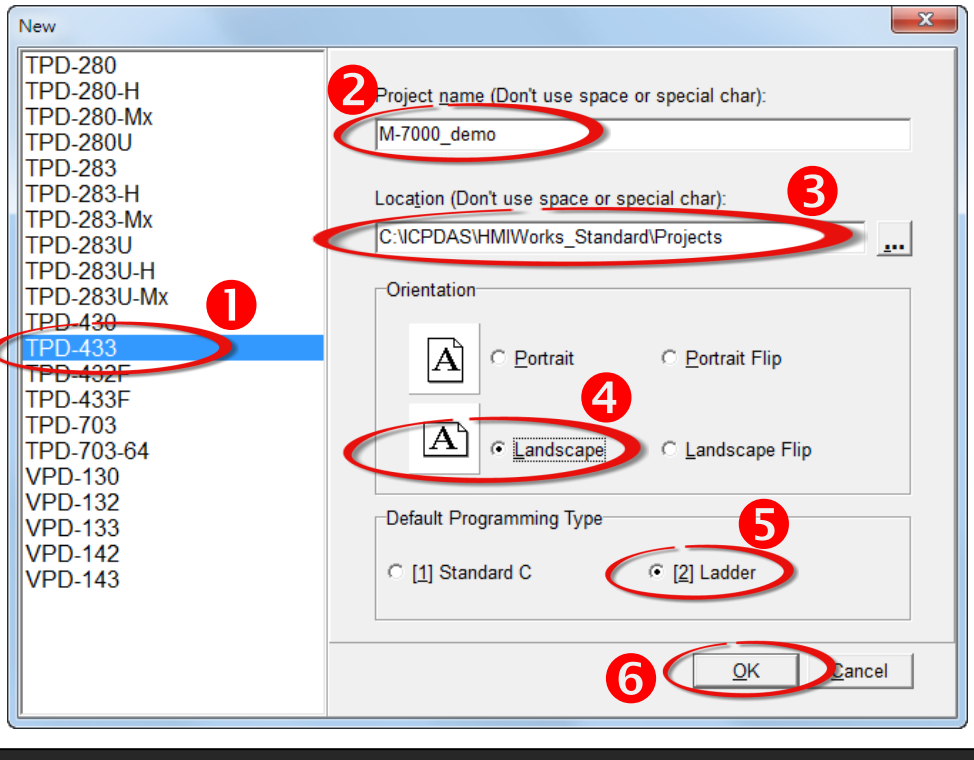
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Step 5: Open the HMIWorks software, click the **"New Project"** icon to create a new project.



Step 6: In the "New" dialog box, configure the parameters for the new project as follows:

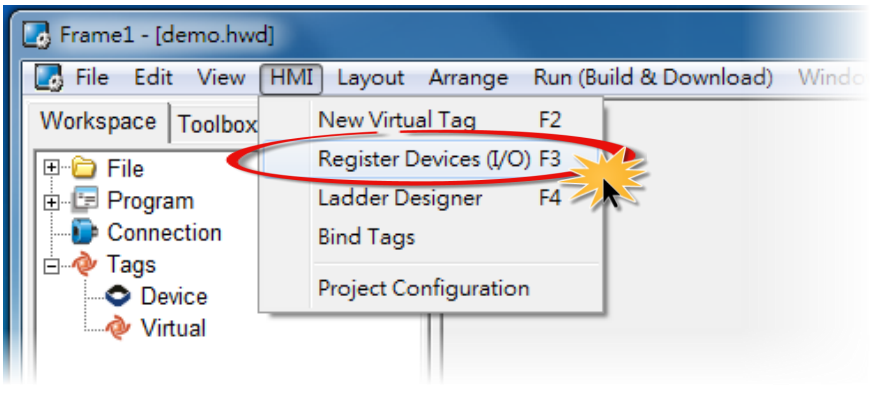
1. Click the name of the TouchPAD model to select it, TPD-433 in this case.
2. Enter a name for the project.
3. Select the location where the project should be saved.
4. Select the orientation for the display.
5. Select the Default Programming Type.
6. Click the **"OK"** button to save the configuration and close the dialog box.



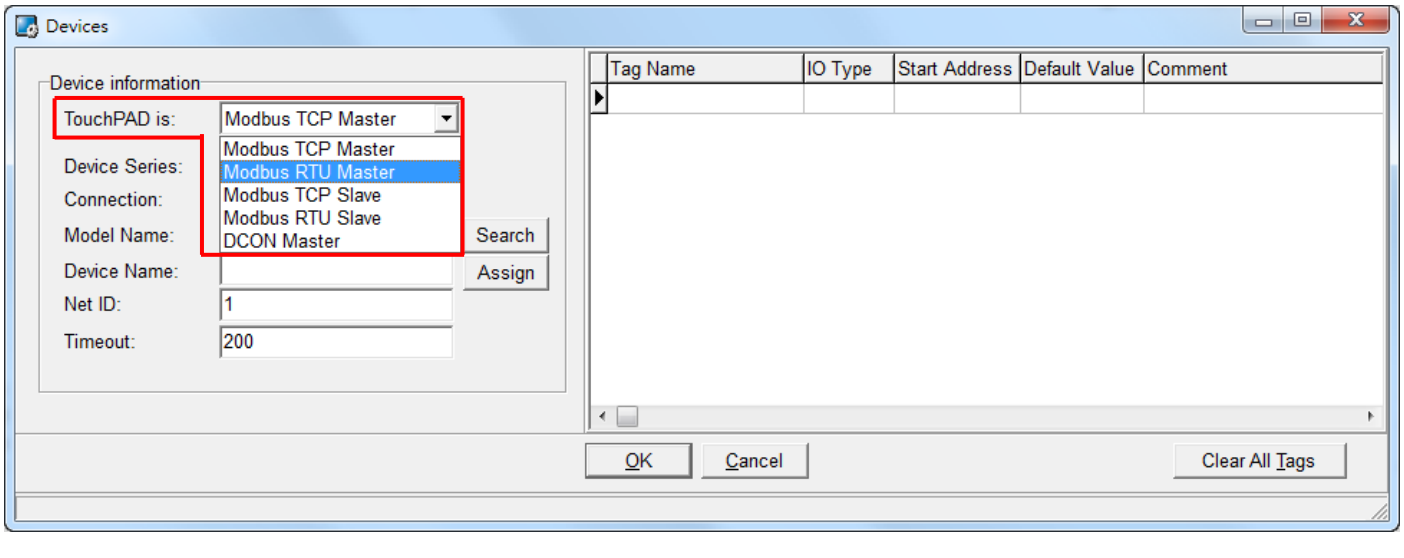
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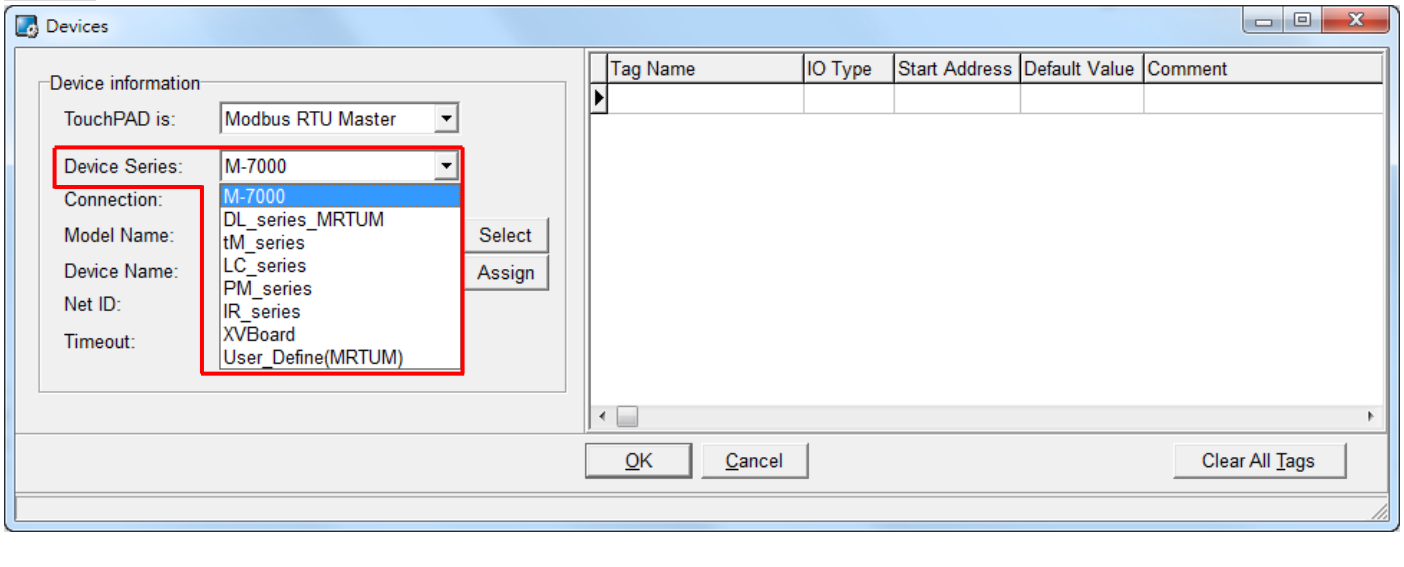
Step 7: Click the **"Register Devices (I/O)"** option from the **"HMI"** menu to open the **"Devices"** dialog box, or press **F3**.



Step 8: Select **"Modbus RTU Master"** from the "TouchPAD is" drop down menu.



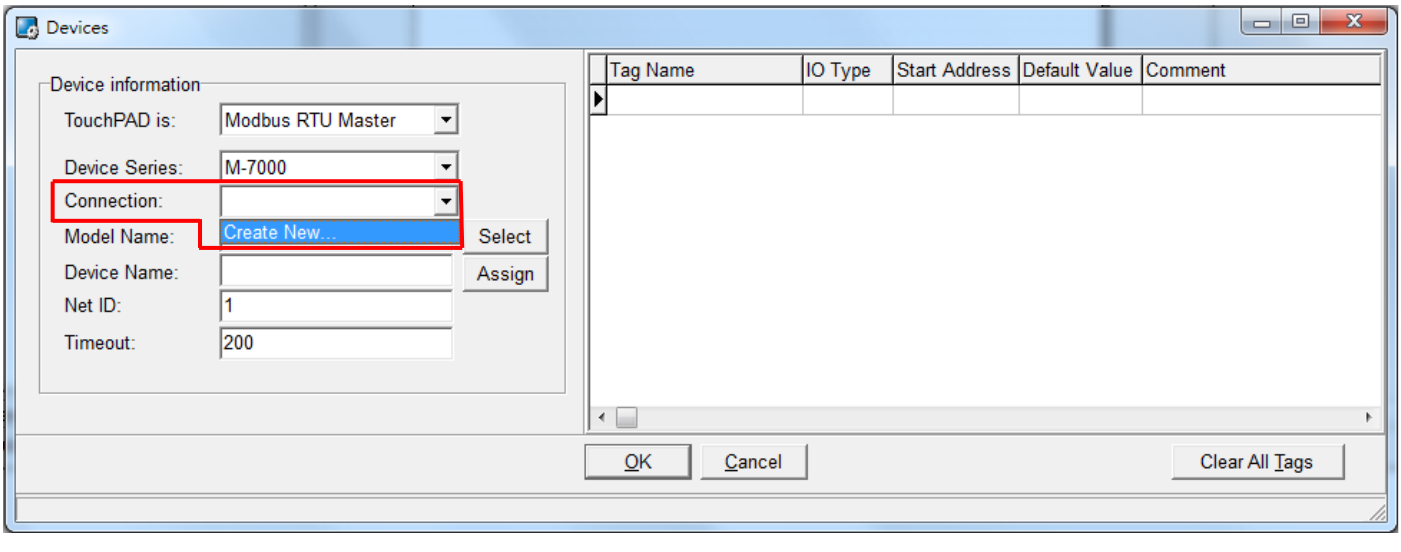
Step 9: Select **"M-7000"** from the "Device Series" drop down menu.



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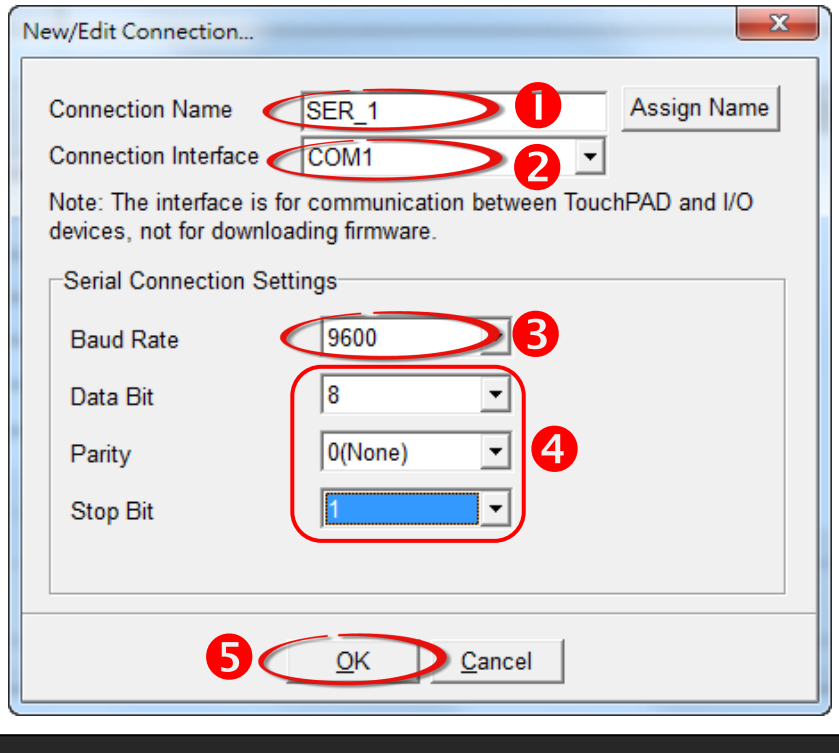
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Step 10: Select **"Create New…"** from the "Connection" drop down menu to open the "New/Edit Connection…" dialog box.



Step 11: In the "**New/Edit Connection…**" dialog box, configure the connection information of the M-7060 module in the following manner:

1. Enter a name for the connection (e.g., SER_1) in the "Connection Name" field.
2. Select **"COM1"** from the "Connection Interface" drop down menu.
3. Select the **Baud Rate of the M-7060** module (e.g., 9600) in the "Baud Rate" drop down menu.
4. Select the **Data Format of the M-7060** module (e.g., 8, None, 1) in the "Data Bit", "Parity" and "Stop Bit" drop down menu.
5. Click the **"OK"** button to save the configuration and close the dialog box.

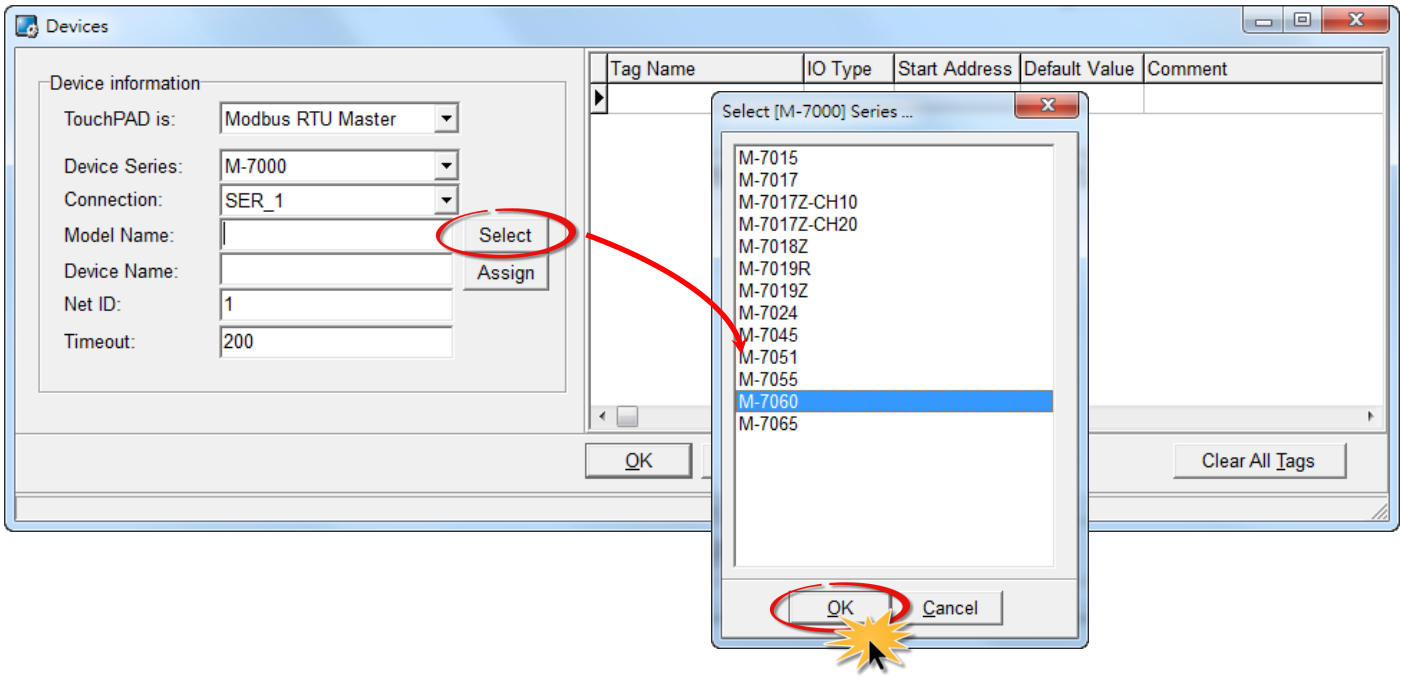


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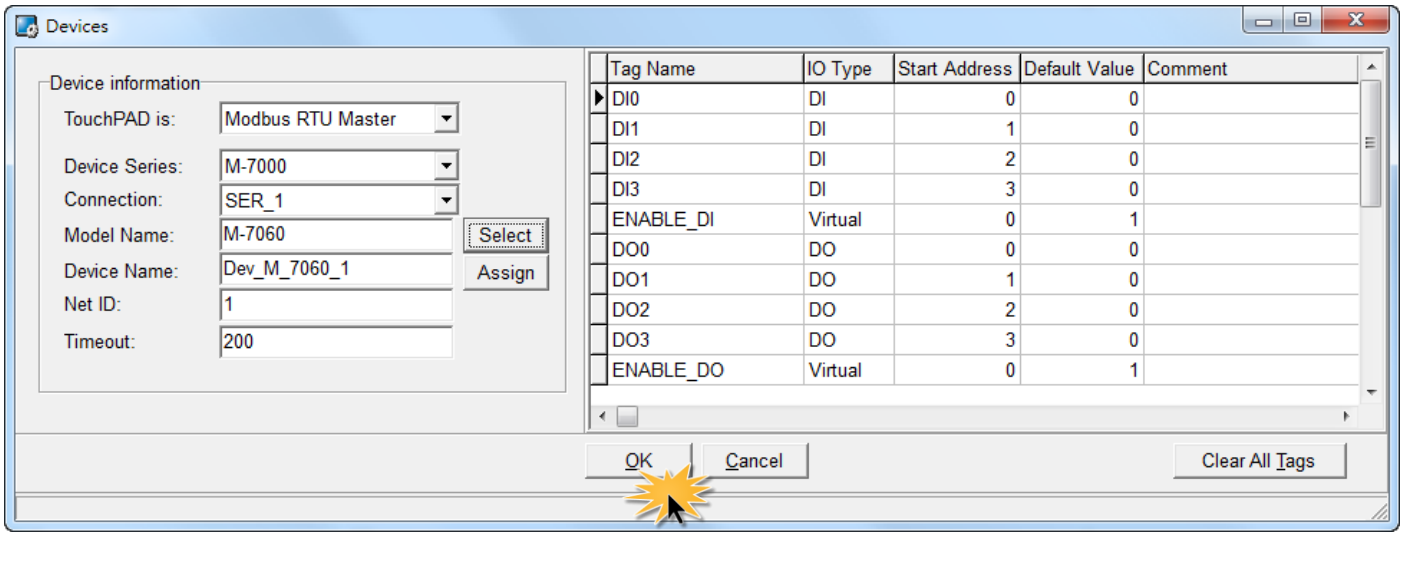
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Step 12: Click the **"Select"** button to open the "Select [M-7000] Series…" dialog box.

Step 13: In the **"Select [M-7000] Series…"** dialog box, select the M-7060 module and then click the **"OK"** button.



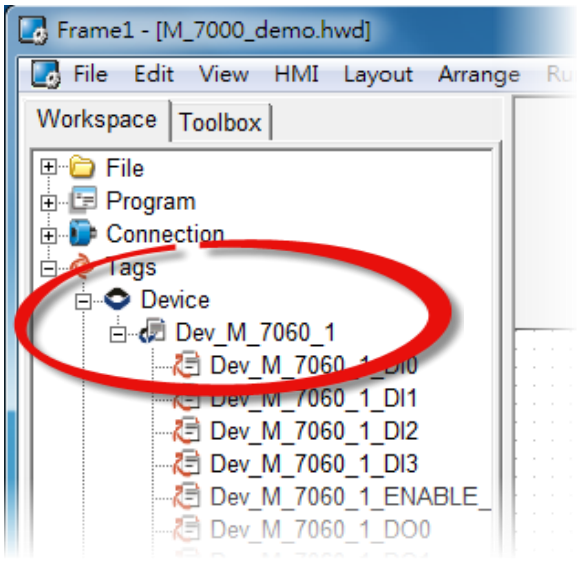
Step 14: Verify that the **information for M-7060 module is correct** (e.g., the Device Name, Net ID, Tag Name, IO Type, Start Address and Default Value, etc.) and then click the **"OK"** button to save the configuration and close the "Devices" dialog box.



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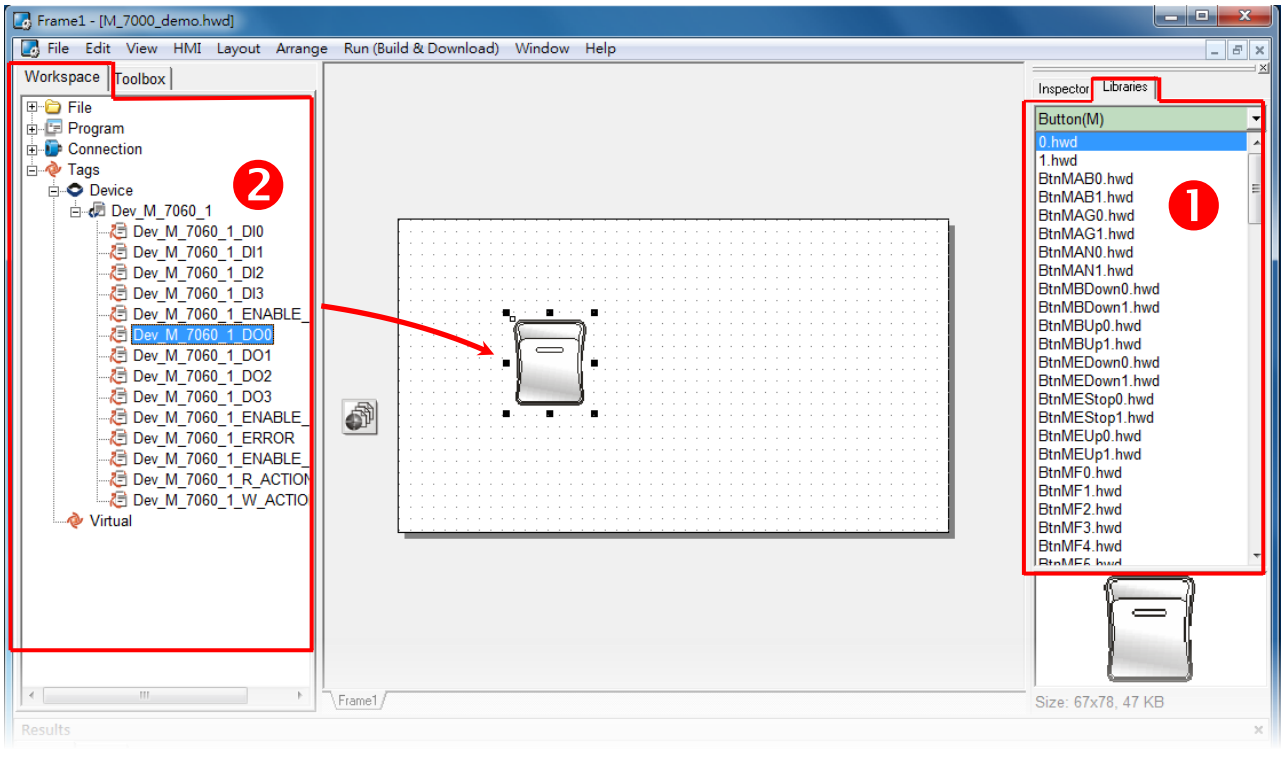
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Step 15: The creation of the **"Dev_M_7060_1"** device is now complete.



Step 16: Use the following procedure to create a DIO sample program:

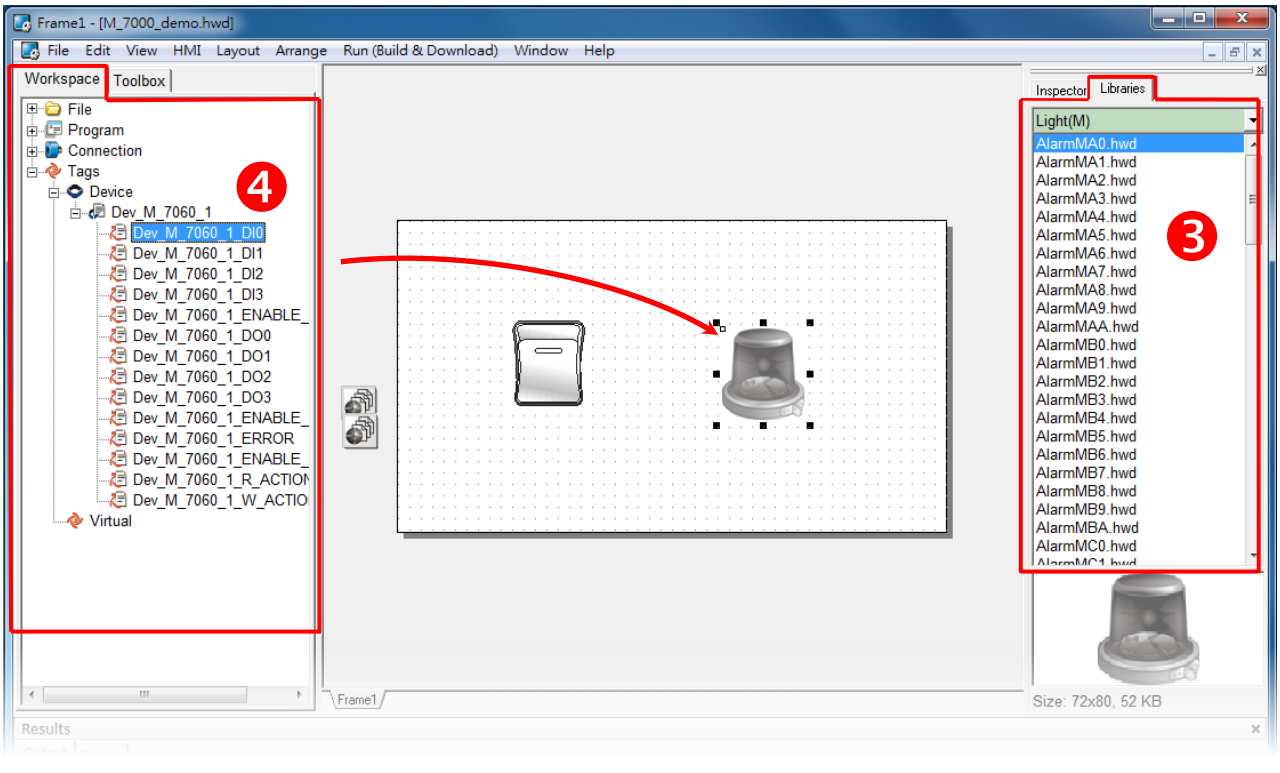
1. Select a "Button" object from the "Libraries" pane to represent the DO0 tag.
2. Drag the **"Dev_M_7060_1_DO0"** tag (DO channel 0) from the "Workspace" pane to the desired position on the design frame.



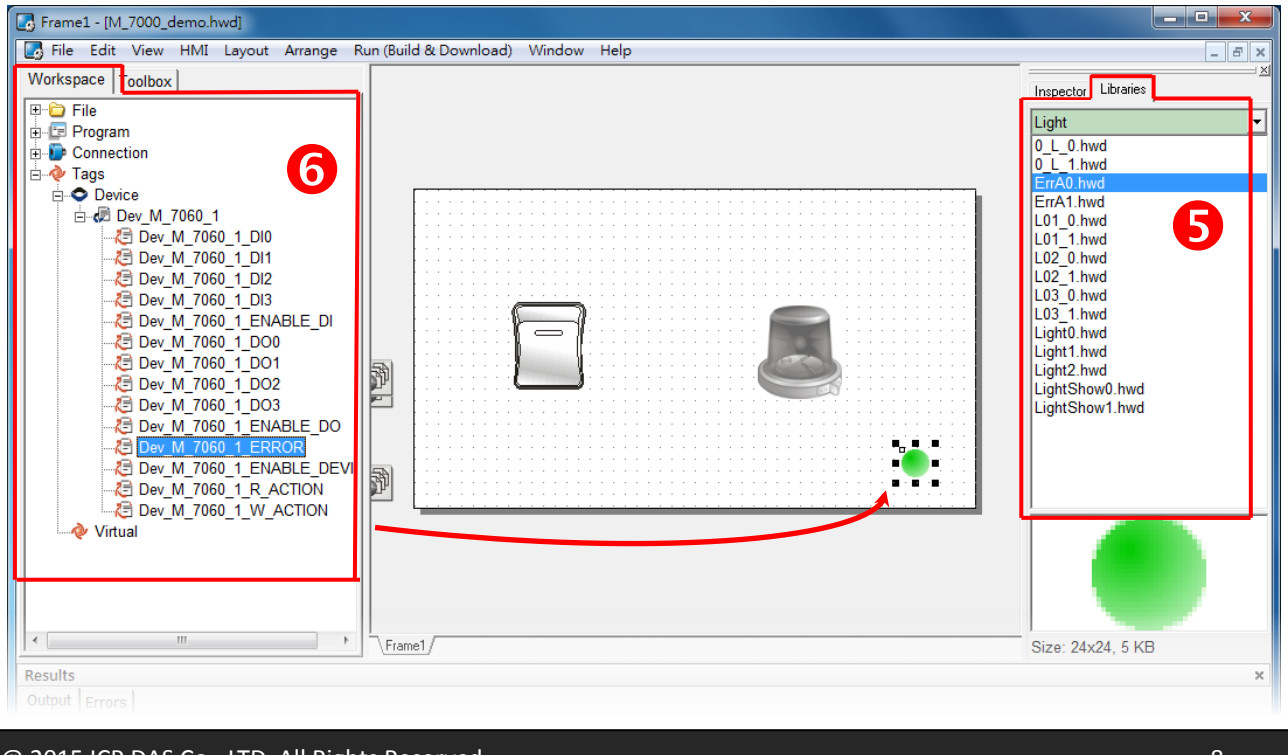
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3. Select a “Light” object from the “Libraries” pane to represent the DI0 tag.
4. Drag the **"Dev_M_7060_1_DI0"** (DI channel 0) tag from the "Workspace" pane to the desired position on the design frame.



5. Select a “Light” object from the “Libraries” pane to represent the ERROR tag.
6. Drag the **"Dev_M_7060_1_ERROR"** tag from the "Workspace" pane to the desired position on the design frame.



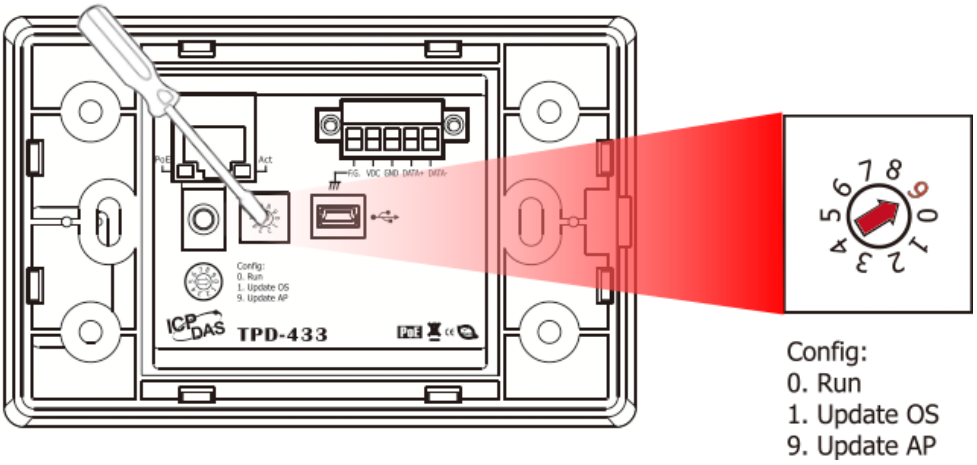
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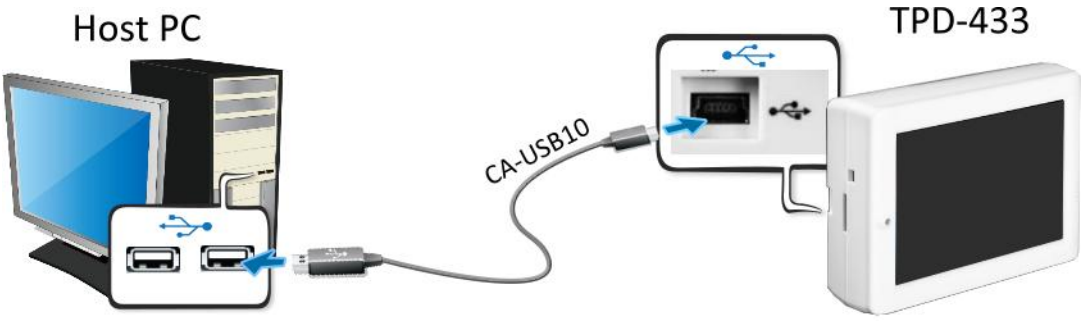
The creation of the DIO sample program is now complete.

Step 17: Once the DIO sample program is complete, it can be uploaded to the TPD-433 module via USB. The detailed configuration and wiring information is as follows:

1. **Power off the TPD-433** module and use a flat-head screwdriver to set the **Rotary Switch** on the TPD-433 module to **"Update AP" mode (position 9)**. Note that the default configuration is **"Run" mode (position 0)**.



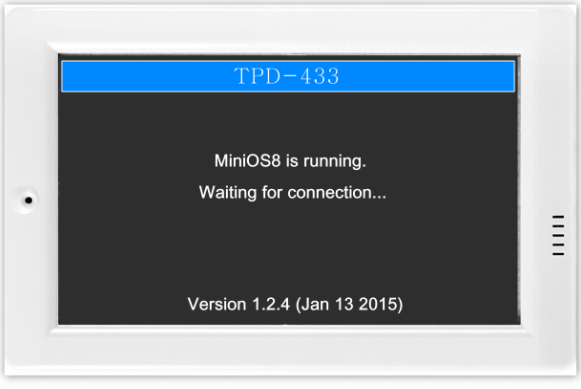
2. Connect the **TPD-433** module to the **Host PC** using a **CA-USB10** cable, and then **Power-on and reboot the TPD-433** module.



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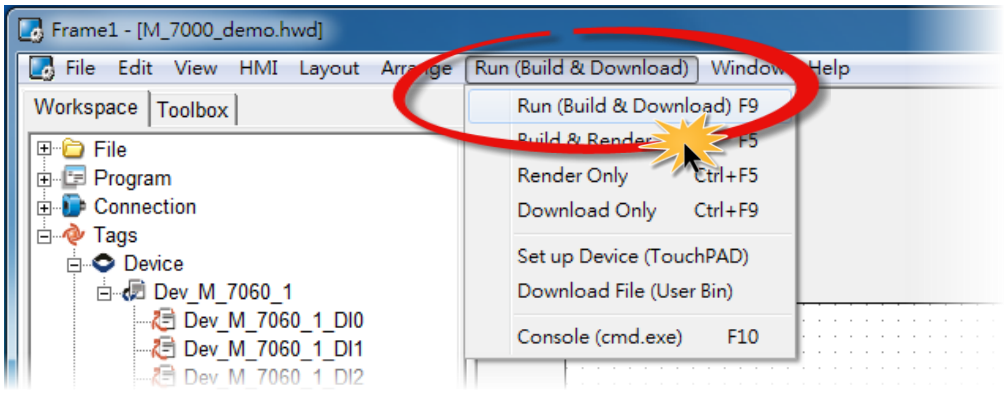
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3. The message: **“MiniOS8 is running. Waiting for connection…”** will be displayed on the TPD-433 module.

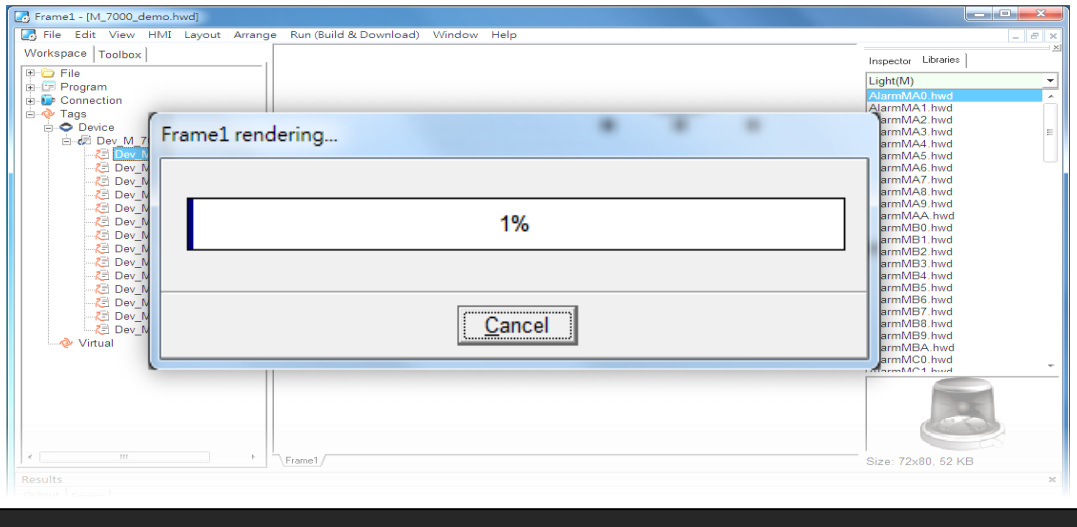


Step 18: The DIO sample program can now be uploaded to the TPD-433 module. Follow the procedure described below:

1. In the HMIWorks application, click the **“Run (Build & Download) F9”** item from the **“Run (Build & Download)”** menu, or press **F9**.



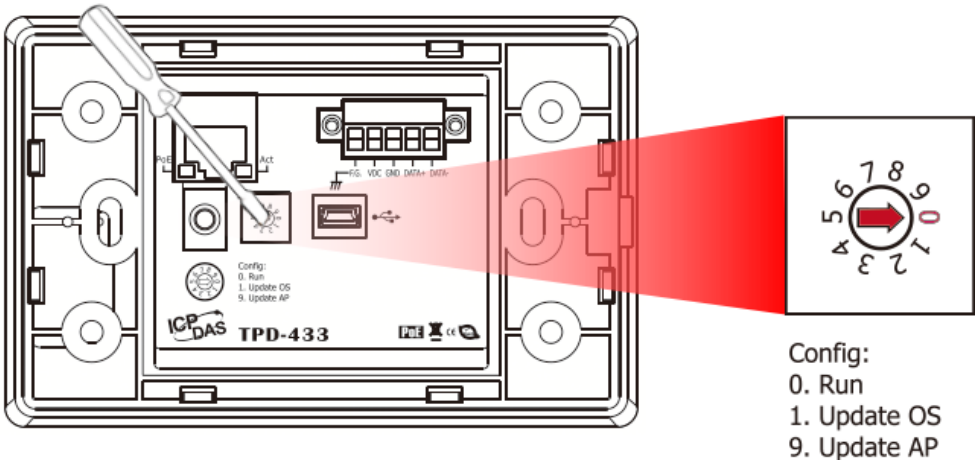
2. The **“Frame1 rendering…”** dialog will be displayed showing the progress of the update.



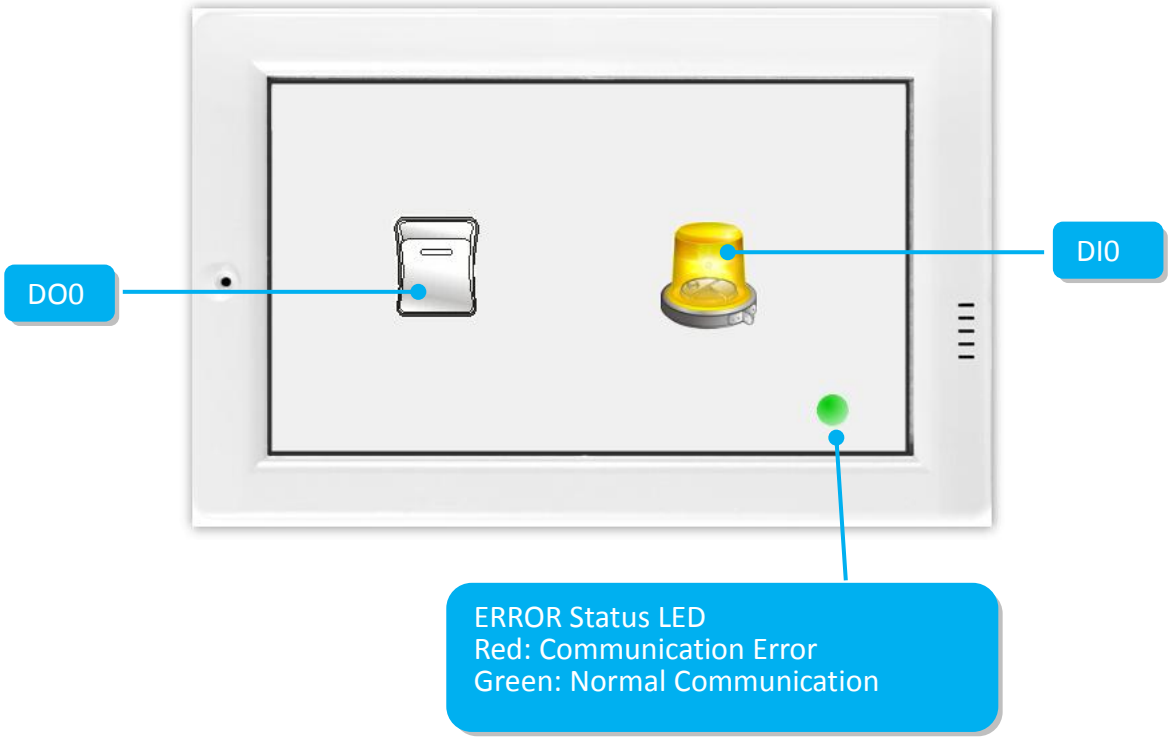
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3. Once the upload is complete (i.e., when the progress indicator reaches 100%), **power off the TPD-433** module and set the **Rotary Switch to "Run" mode (position 0)**.



4. **Power-on and reboot** the TPD-433 module so that the module is operating in **"Run" mode**. The TPD-433 module will then execute the DIO sample program.

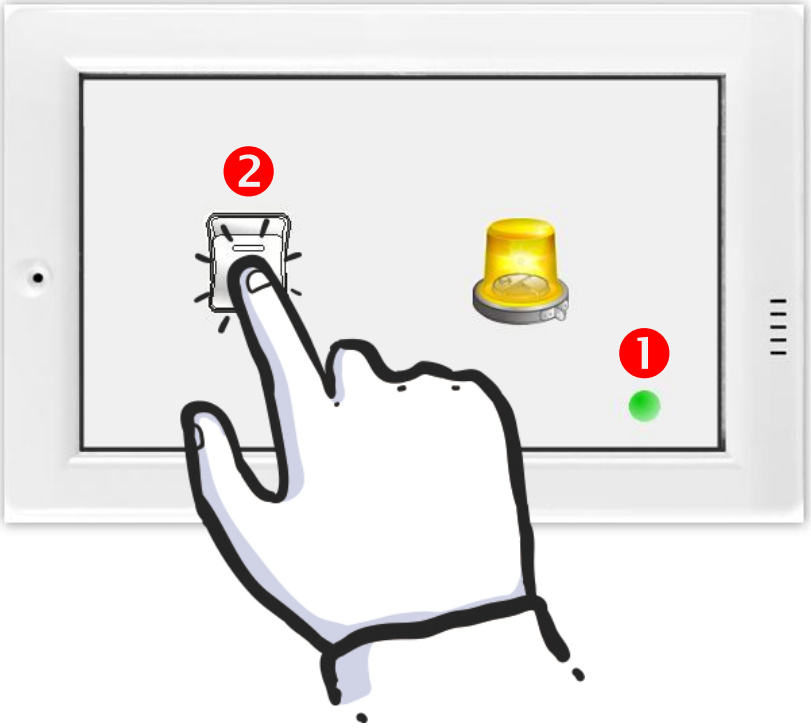


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Step 19: Verify the results of the DIO functions test in the following manner.

1. Check that the ERROR LED on the M-7060 module is in the normal communication state (green).
2. Tap the DO0 icon on the TPD-433 module.



3. Check that the DI0 icon has changed between states (e.g., yellow or grey).



-Complete-

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