

Communication with

Rockwell CompactLogix series

V1.0



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**Overview**

This document introduces the free label protocol steps for PI3070ig and AB 1769-L16ER-BB1B, which is divided into three parts:

⚫ Software Configuration of RSLinx Classic Lite

⚫ Software Configurations of PLC

⚫ Software Configurations of HMI

**I Software Configuration of RSLinx Classic Lite**

**1.1 RSLinx Classic Lite**

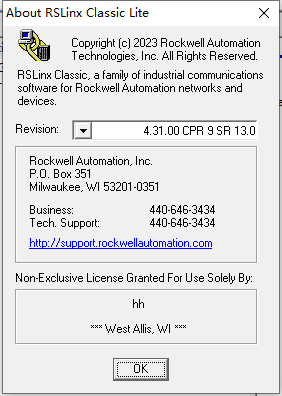


Figure 1-1

**1.2 Configuring the Driver**

1.Open the RSLinx Classic Lite software and click [Configure Drivers...] in [Communications].

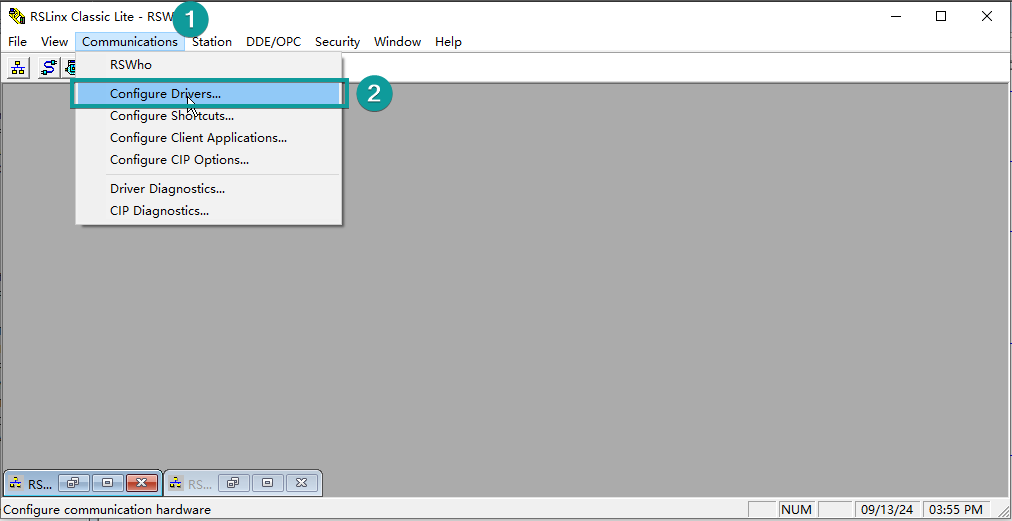


Figure 1-2

2.Click the drop-down menu and select EtherNet/IP driver

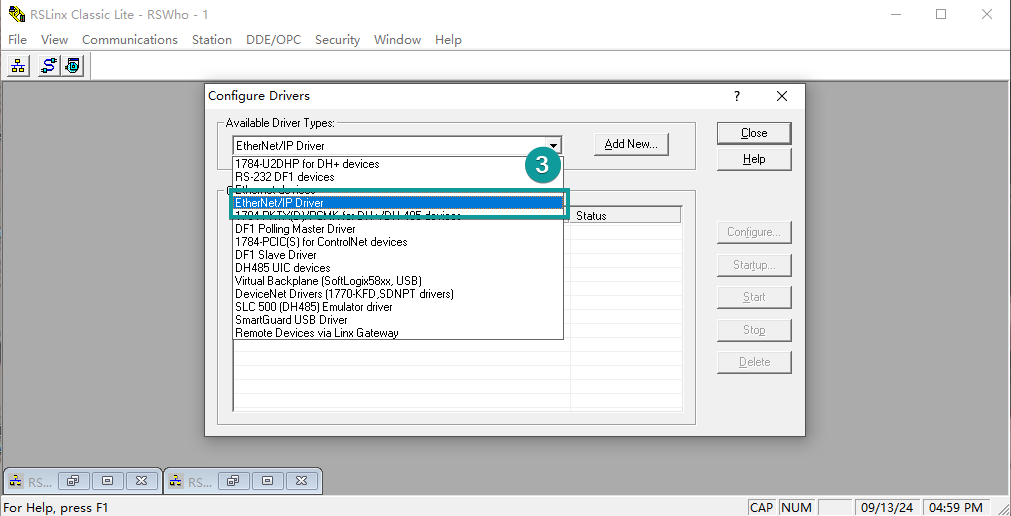


Figure 1-3

3.Click Add New and a pop-up window will pop up. Name the driver and click [OK] in the pop-up window.

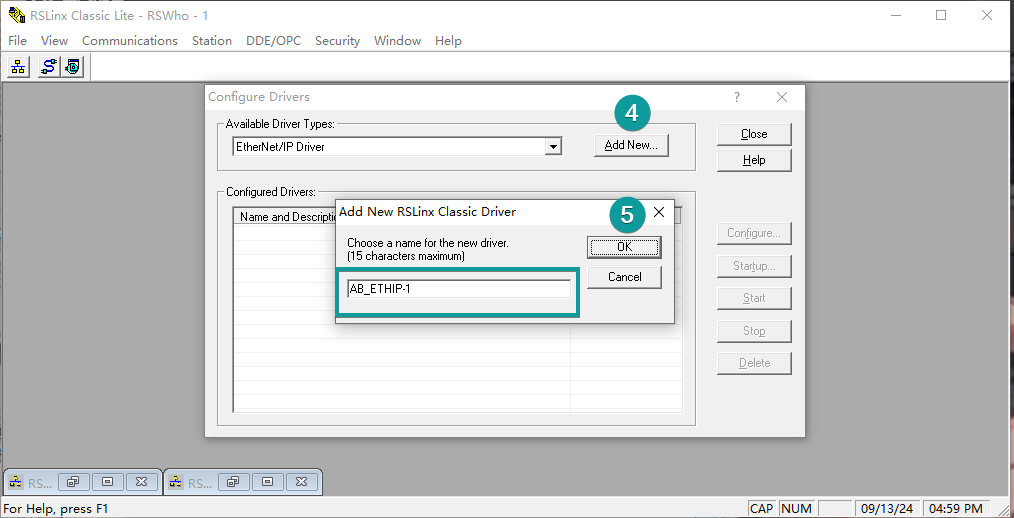


Figure 1-4

4.The configuration driver window pops up., click on the correct network adapter option (such as the ASIX USB to Fast Ethernet Family Adapter option in this picture), and click [OK].

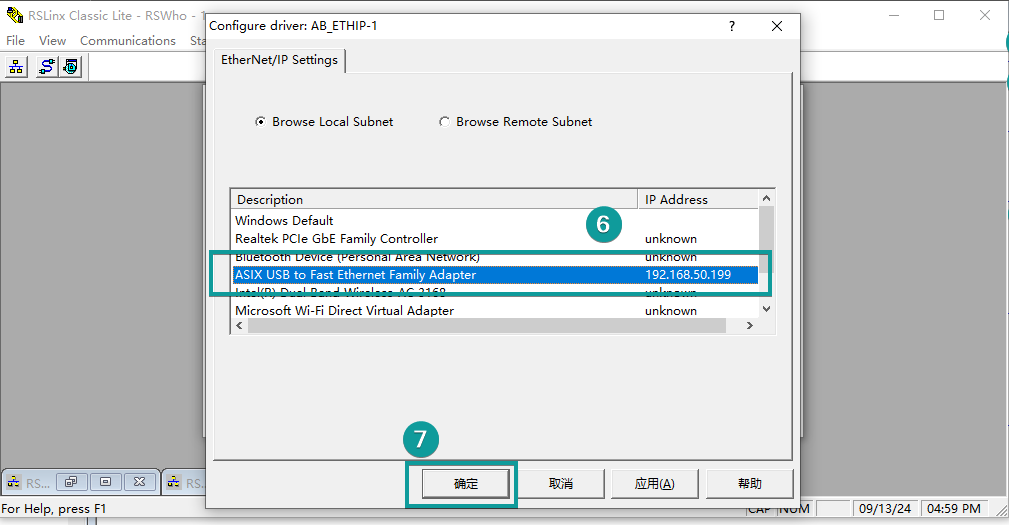


Figure 1-5

5.Click the [Close] button

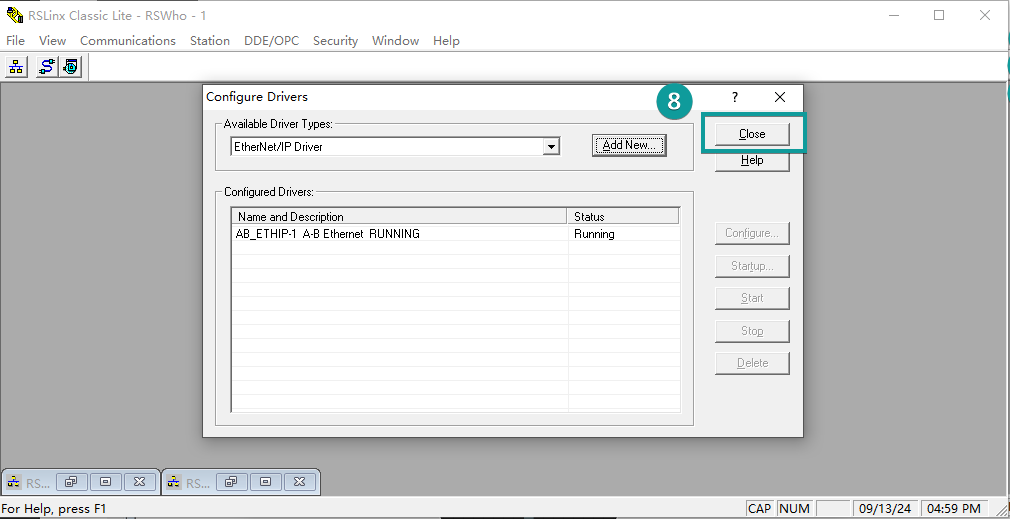


Figure 1-6

**II Software Configurations of PLC**

**2.1 Stuido5000**

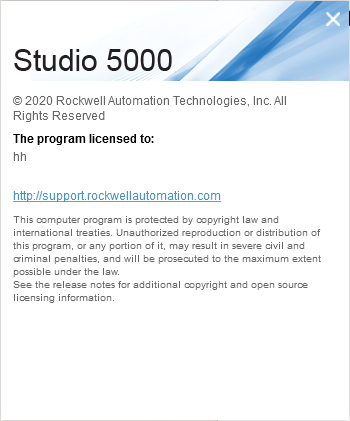


Figure 2-1

**2.2 New project**

1.Open Stuido5000 and create a new project or open an existing project.

To create a new project: click [New Project].

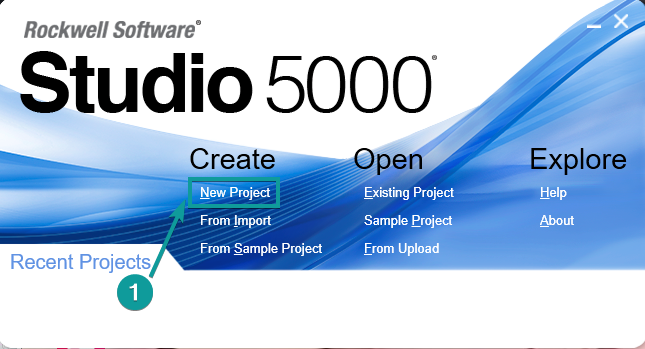


Figure 2-2

2.Click the [1769-L16ER-BB1B]→ Edit Project Name → Select the file storage location → [Next]

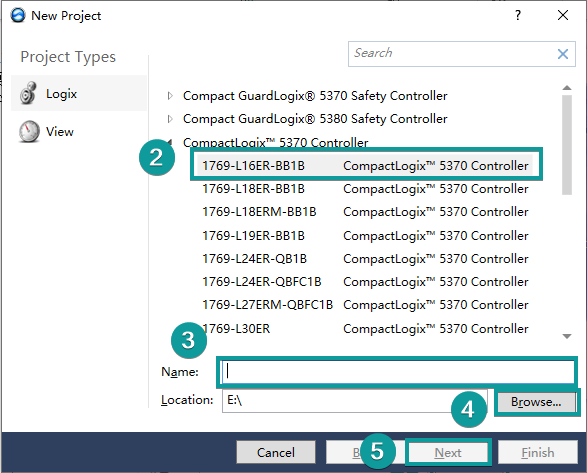


Figure 2-3

3. Select the software version →Select [Expansion I/O] number→ Security Authority → Click [Finish].

The software version must be the same as the PLC firmware version, and the Security Authority protection should be selected according to personal needs.

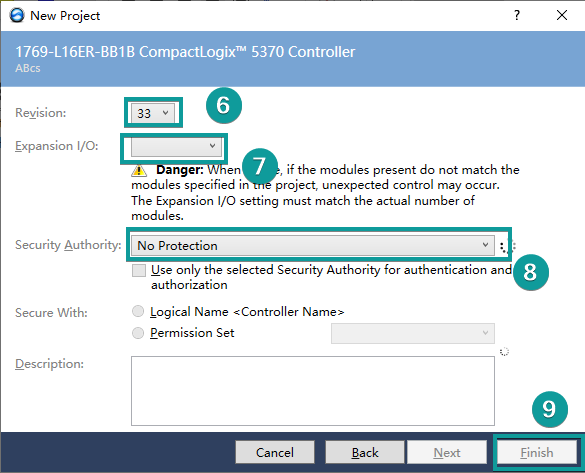


Figure 2-4

**2.3 Create a new tag**

1.Click the drop-down menu on the left of [Controller ABcs]→ Right-click [Controller Tags] → Click [New tag].

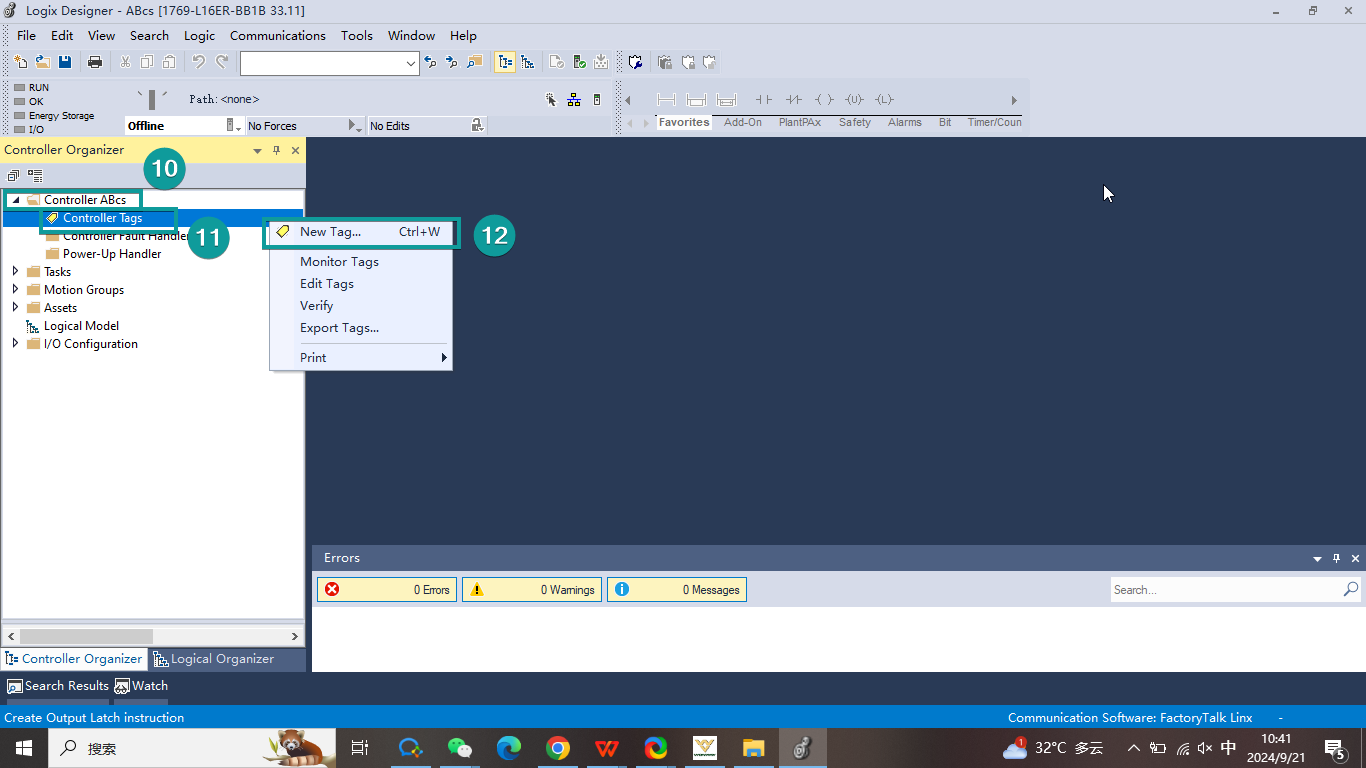


Figure 2-5

2.Input tag name → Select tag type → Create

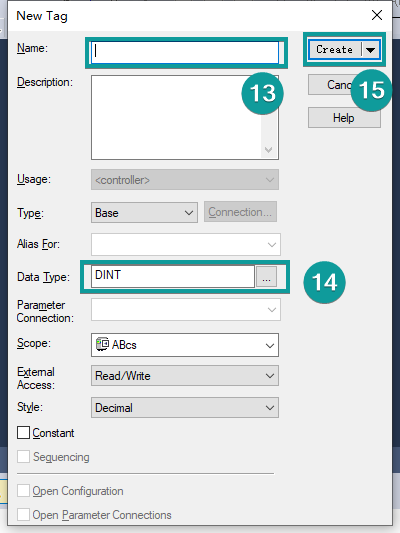


Figure 2-6

**2.3 Establishing communication**

1.Click [Communications]→Click[Who Active].

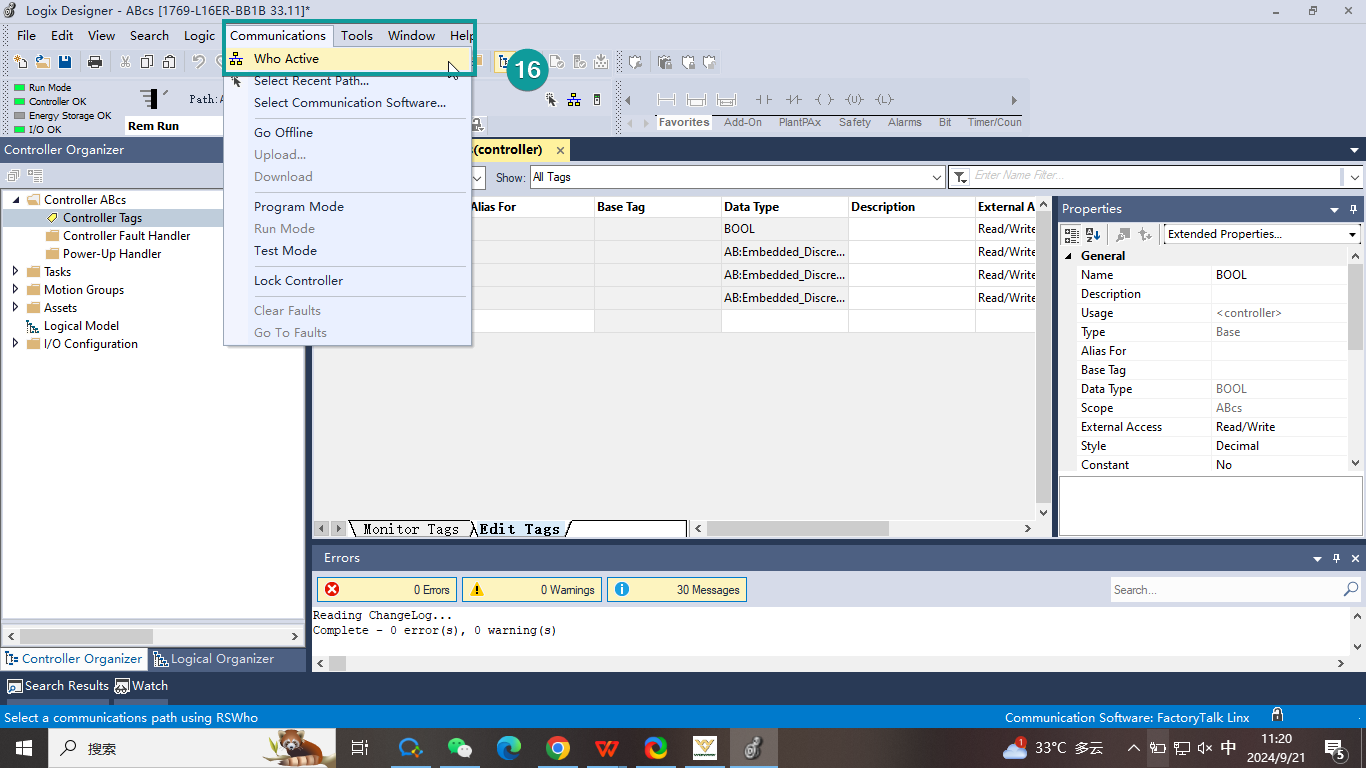


Figure 2-7

2.Select the drive → Select the corresponding PLC →Click [Go Online].

The driver is a new created driver from step 1.2

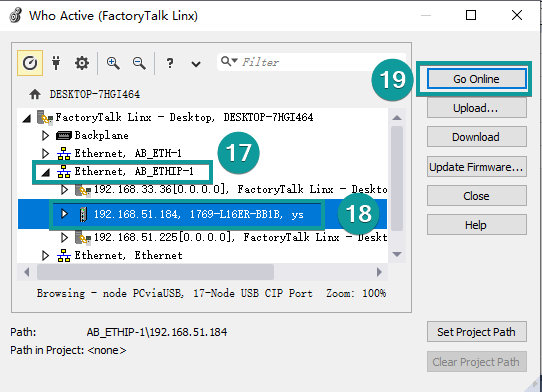


Figure 2-8

3.Click [Download]

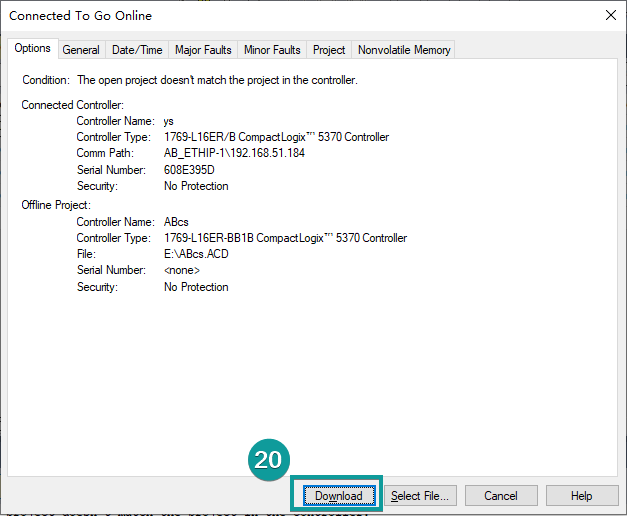


Figure 2-9

4.Click [Download]→ [YES].

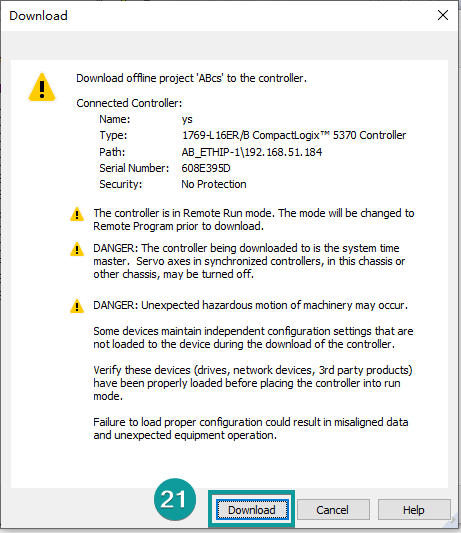


Figure 2-10

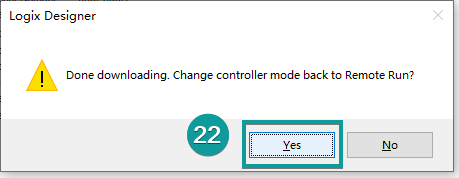


Figure 2-11

**2.5Export Tags**

1.Click the drop-down menu on the left of [Controller ABcs]→Right-click [Controller Tags]→ Click [Export Tags].

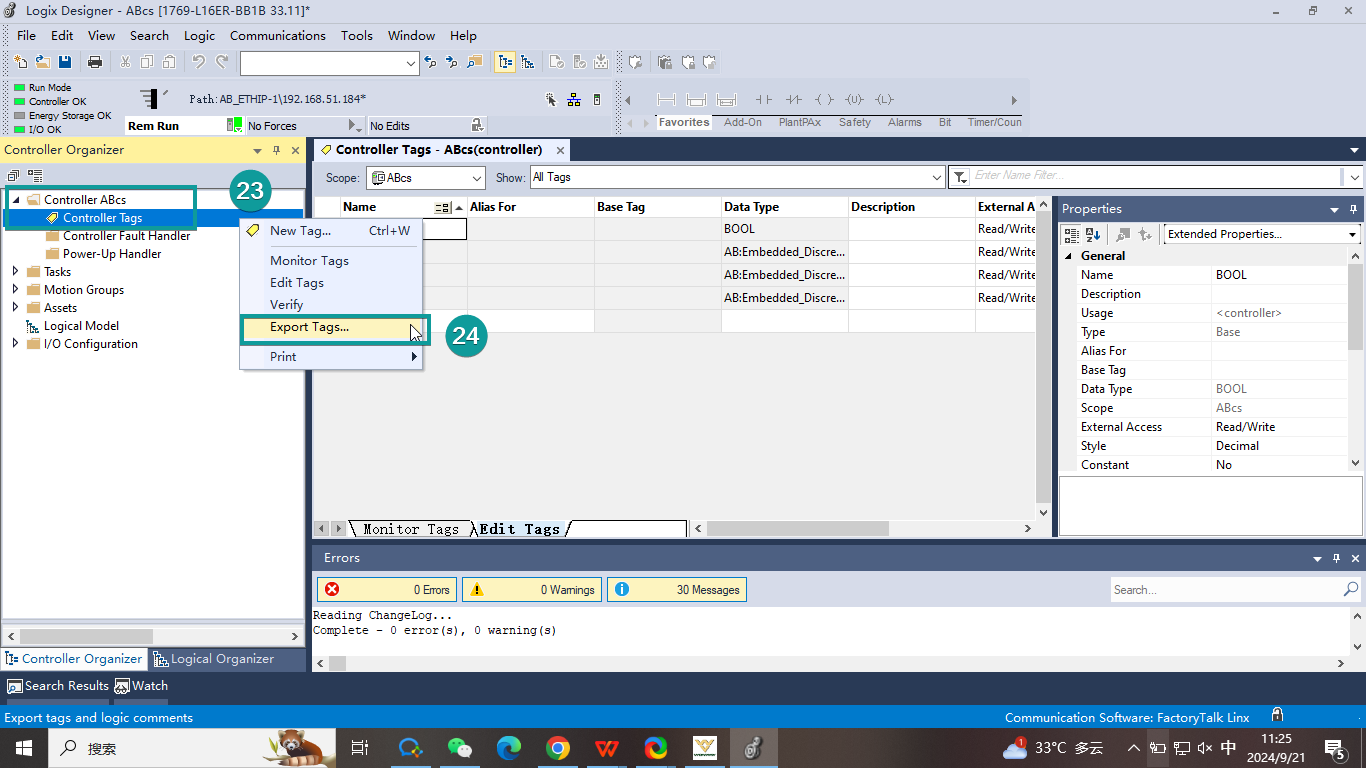


Figure 2-12

2.Edit the tag file name → Select the file storage location → [Export].

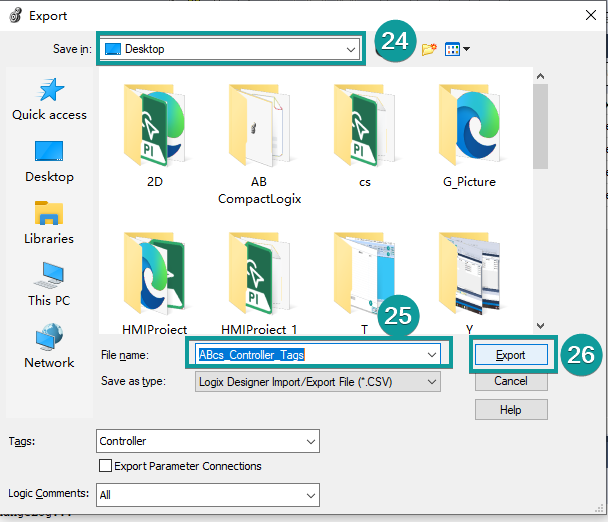


Figure 2-13

**Ⅲ Software Configurations of HMI**

**3.1 PIStudio**

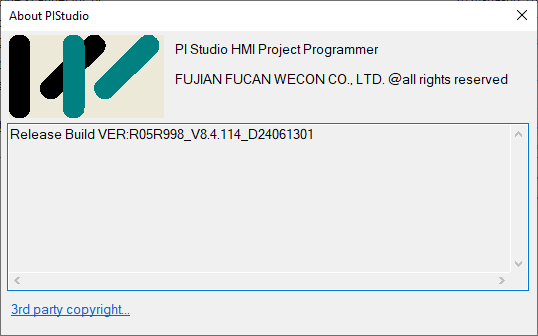
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Figure 3-1

**3.2 New project**

1.[Home]→[New]→[New project]→Set the name,series and model of HMI→[Next]→[Screen style] →[OK].

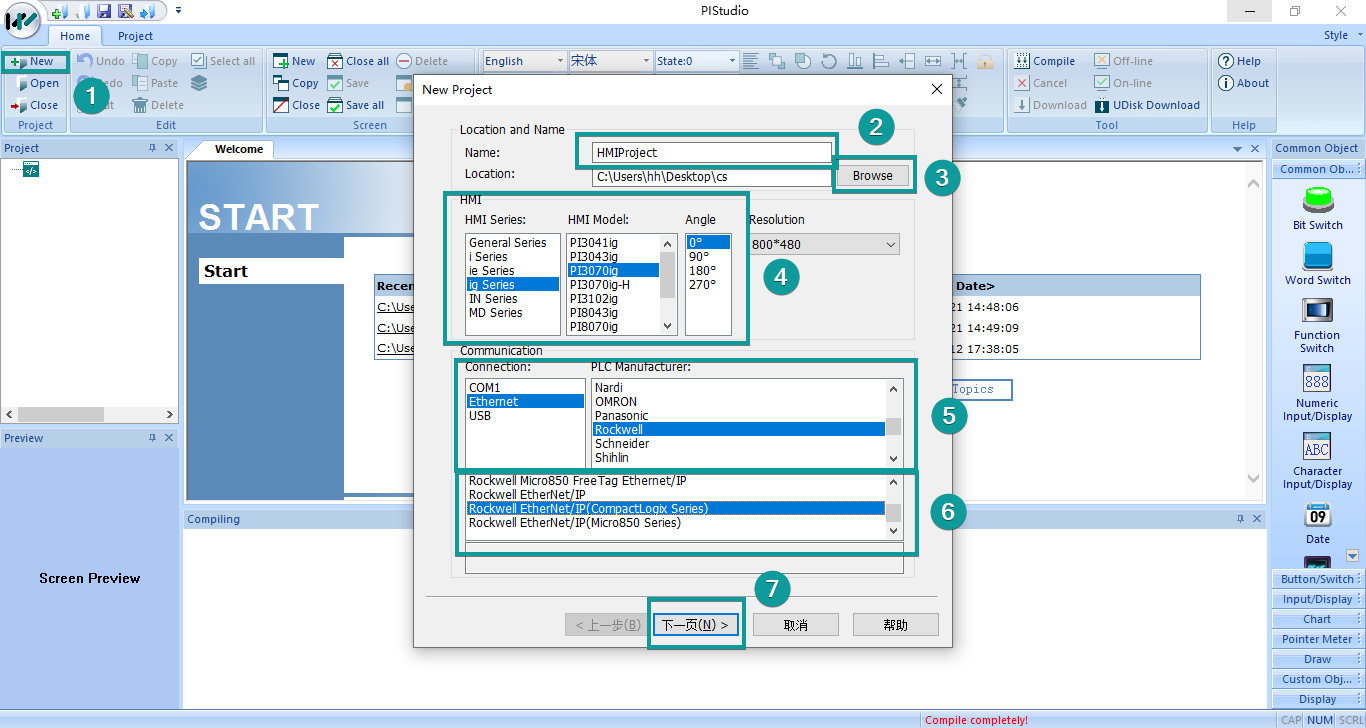


Figure 3-2

**3.3 Communication configuration**

① [Project]→[Communication]→[Setting]

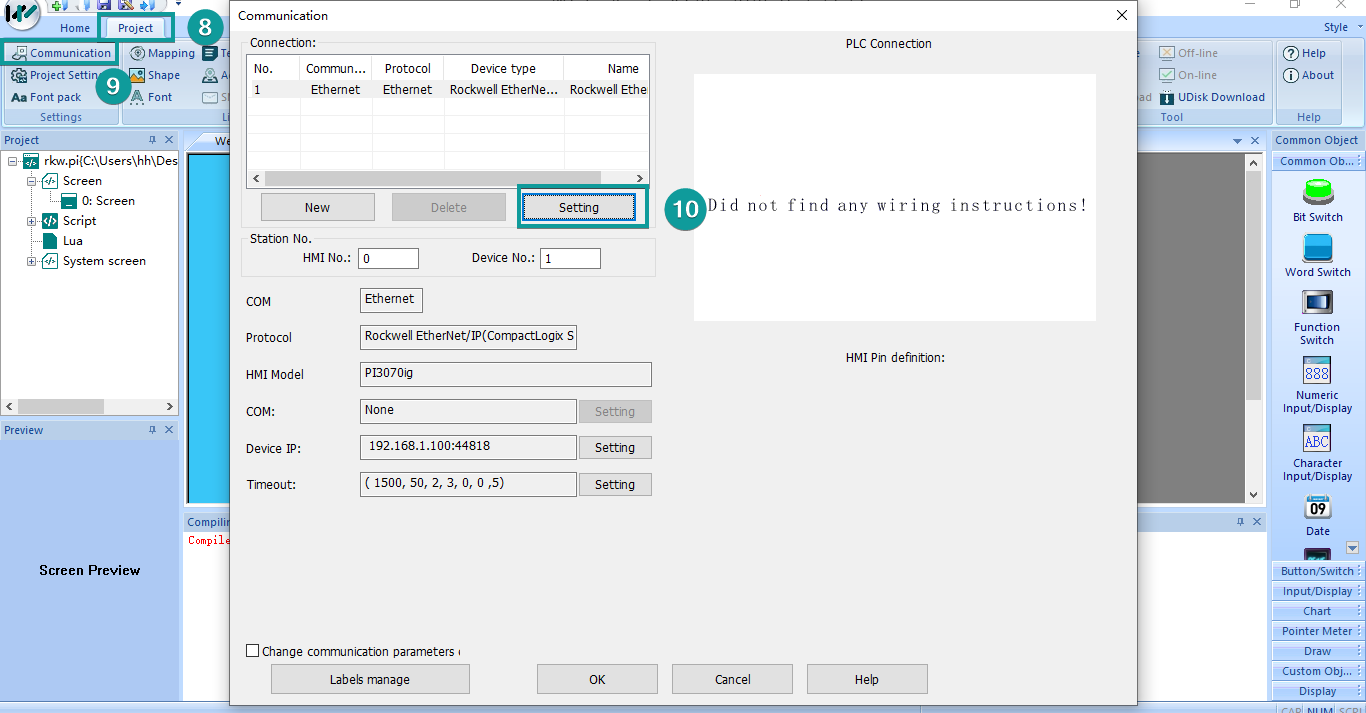


Figure 3-3

② Choose protocol:

Device type [Rockwell]→[Rockwell EtherNet/IP(CompactLogix Series)]→[OK]

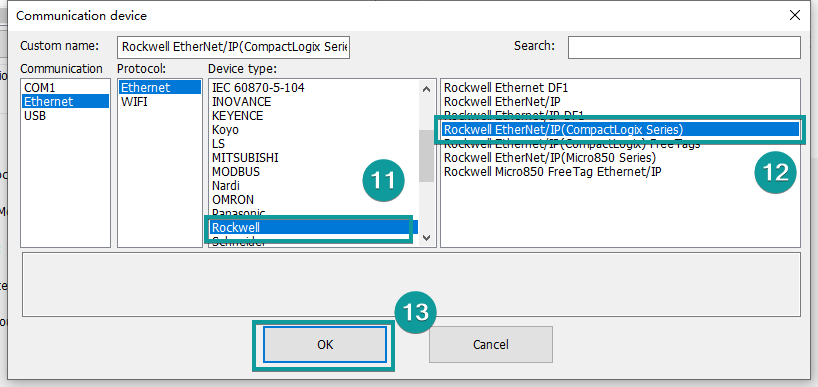


Figure 3-4

③[Setting]→[PLC IP Address]→[OK]→[Labels manage].

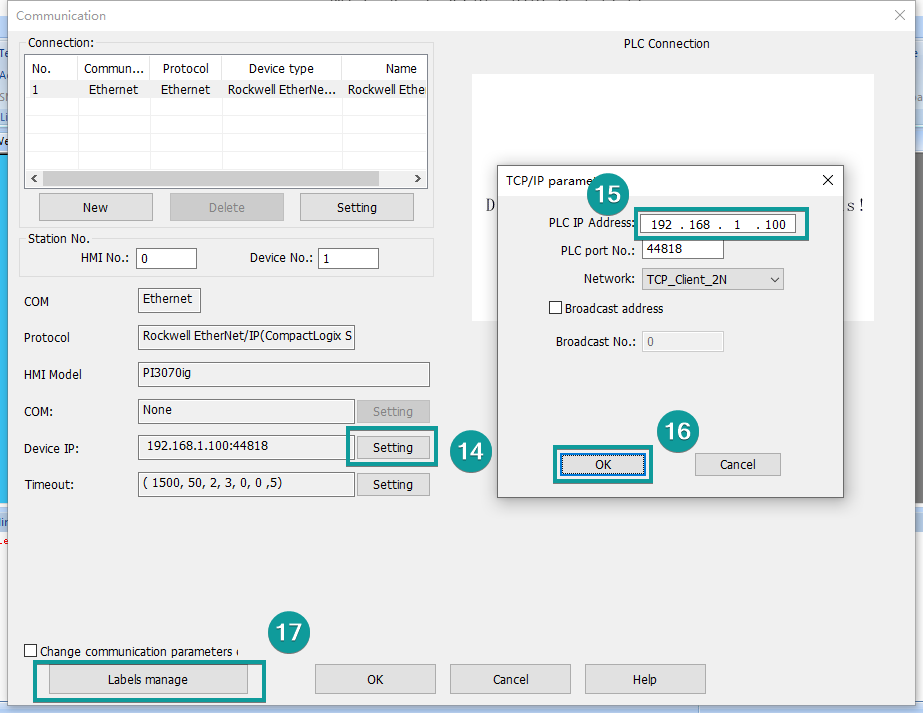


Figure 3-5

④Tags import:

[Import Tags From File]→Choose the .CSV file→[Open]→[Save]→[OK]

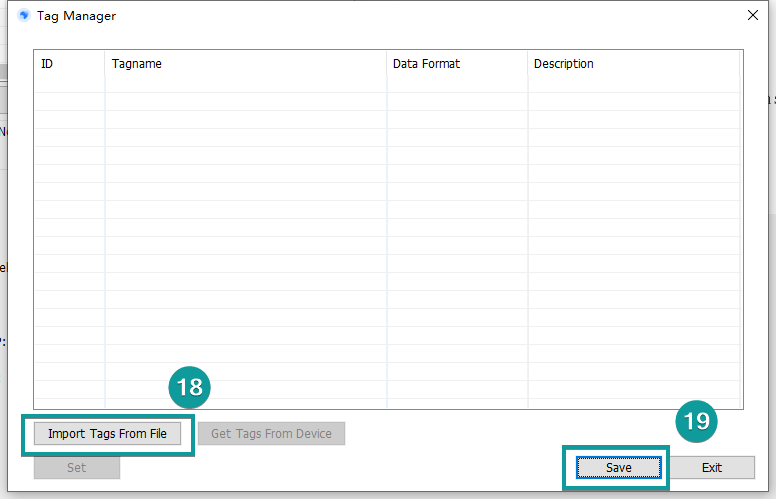


Figure 3-6

**3.4 Project making**

①Using PIStudio to program a HMI project depending on the requirements.

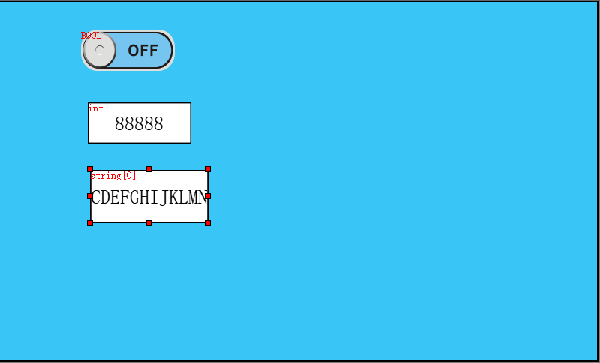


Figure 3-7

②After programming[Compile], you can download the project into HMI when compilation complete.

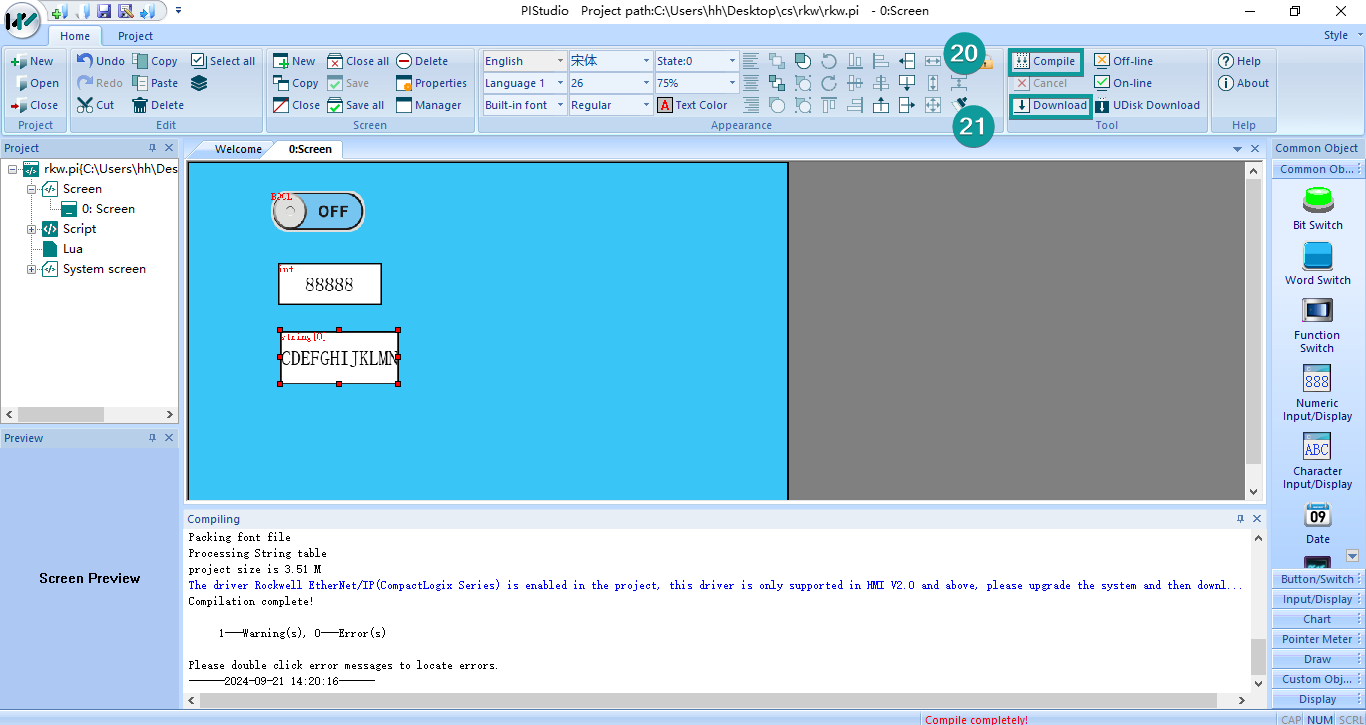


Figure 3-8