How to switch between FBD and LADDER

1，FBD → Ladder

The default factory system of RIEVTECH-PLC is FBD.

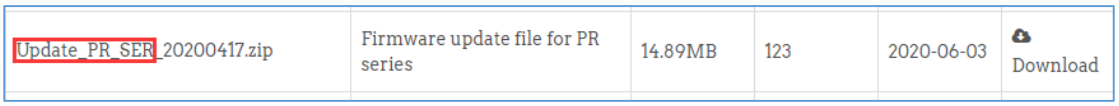
As the CPU chips used by each series of products are different, there will be three methods to switch from FBD mode to ladder mode.
There are 3 situations:

	Applicable Model
(1)	PR-12DC-DA-R, PR-12AC-R
(2)	PR-14, 18, 24 series, EXM-12DC-DA-RT-WIFI
(3)	PR-12N, 18N, 26N series

(1) PR-12DC-DA-R, PR-12AC-R

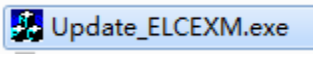
These 2 types of PLC need to use firmware update package to burn the firmware of the corresponding mode.

1. Download the PR series firmware update package on the REVTECH website:
https://www.rievtech.com/download.html

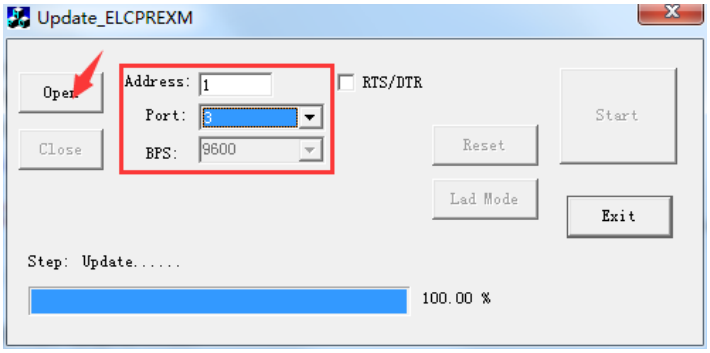


Note: The suffix date of the update package file name will change accordingly.

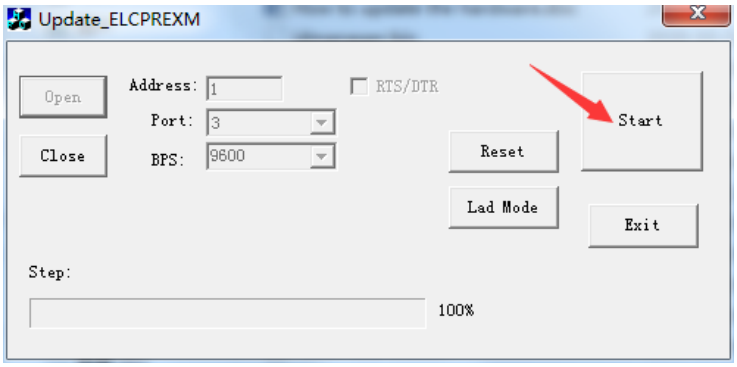
2. After the download is complete, press it into a folder.
Execute the exe file in the folder.



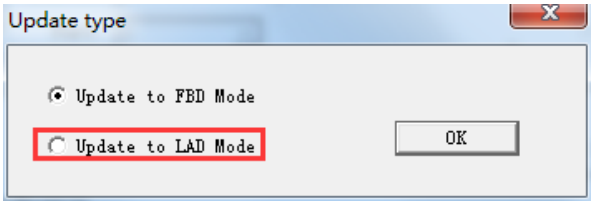
3. Select the com port of the programming cable (you need to set the BPS of PLC com0 to 9600, RTU), and then click the ‘Open’ button.



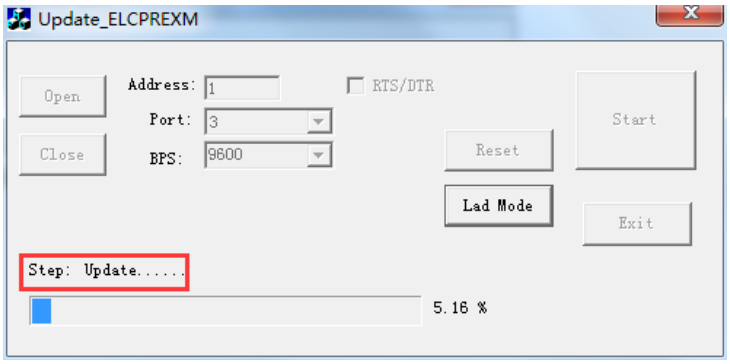
See below:



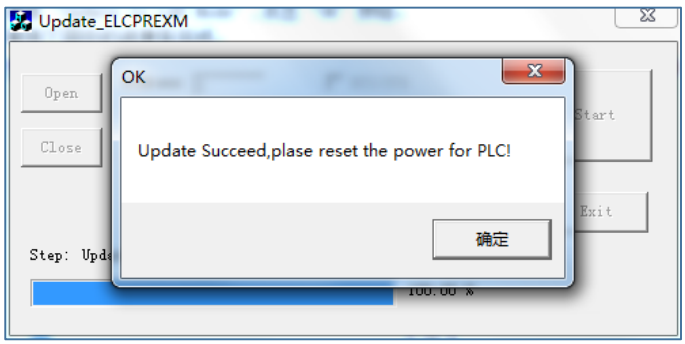
4. Then click the ‘Start’ button, and the following prompt will pop up:



5. Select ‘Update to LAD Mode’ and click the ‘OK’ button.
Wait for the progress bar in the figure below to complete.



6. After the update is completed, the following prompt will appear.



7, Power off the PR-12DC-DA-R and then power on and restart, and the LCD will display

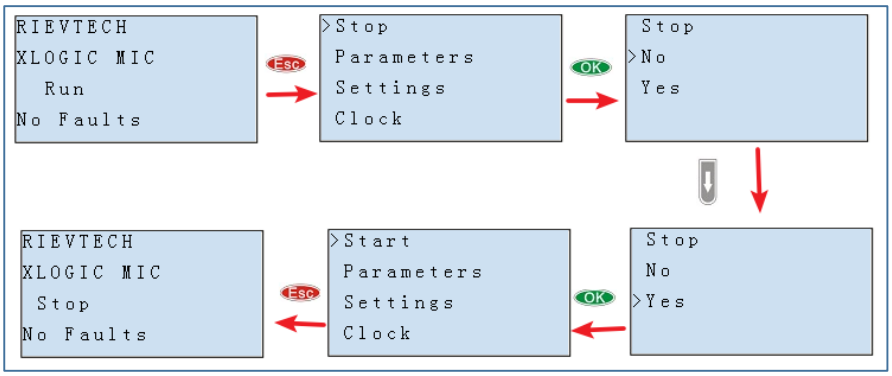
LADDER MODE

RUN

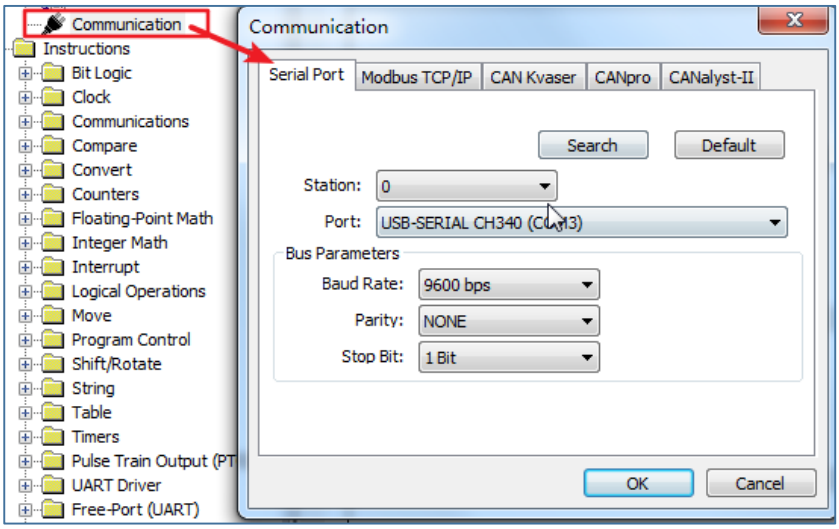
Now this PLC works in ladder mode.

(2) PR-14, 18, 24 series, EXM-12DC-DA-RT-WIFI

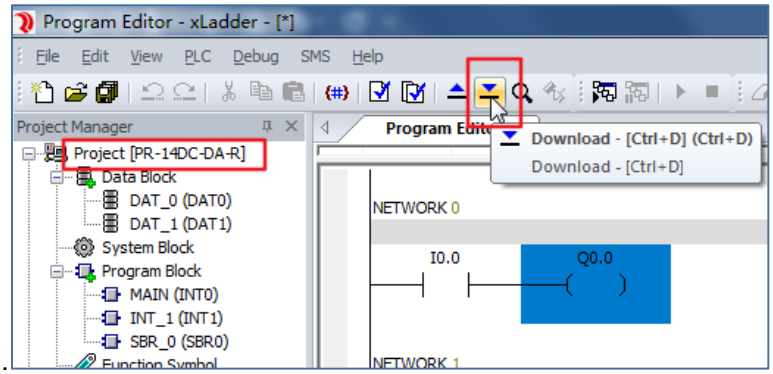
1. Set the PLC to the STOP state on the LCD panel, the steps are as follows:



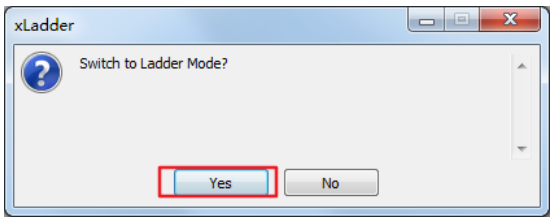
2. Open the xLadder software and select the com port of the programming cable, as shown below:

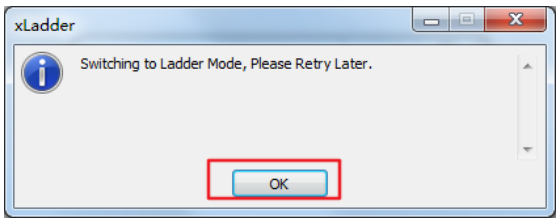


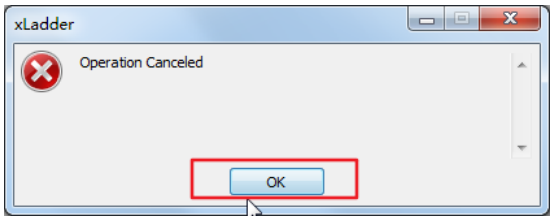
3. Choose the correct PLC model, such as PR-14DC-DA-R. Then click the ‘Download’ button in the picture below



4. Then a series of prompt windows will pop up as follows.







5. Then, the following characters will be displayed on the LCD:

LADDER MODE

RUN

This PLC has successfully switched to ladder mode.

(3) PR-12N, 18N, 26N series

These models do not require mode conversion, and programs in xLogic software and xLadder software can be downloaded directly to the PLC.

2，Ladder → FBD

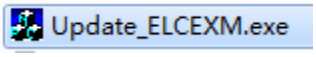
(1) PR-12DC-DA-R, PR-12AC-R

1. Download the PR series firmware update package on the REVTECH website:
https://www.rievtech.com/download.html

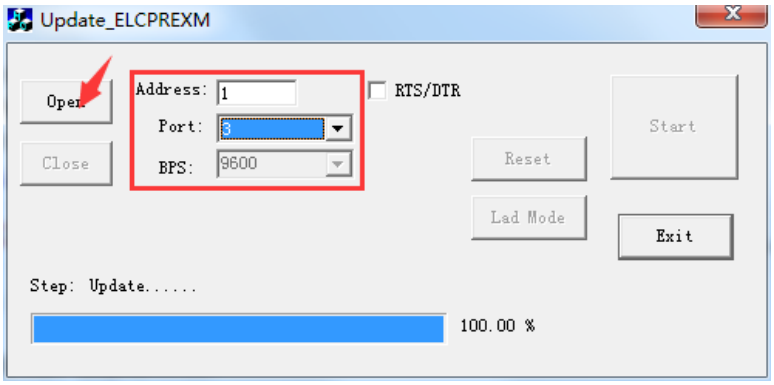
Update_PR_SER_20200417.zip	Firmware update file for PR series	14.89MB	123	2020-06-03	Download

Note: The suffix date of the update package file name will change accordingly.

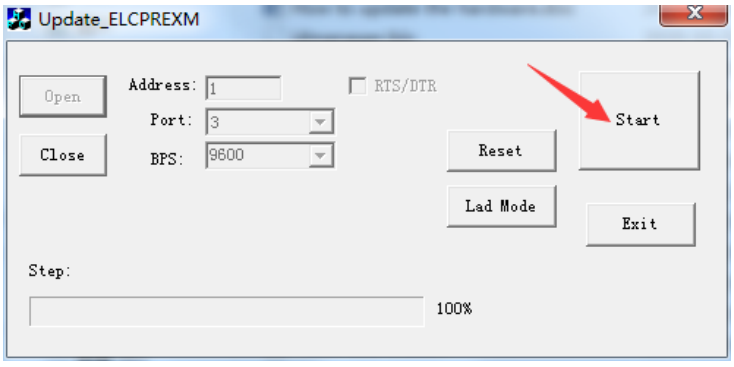
2. After the download is complete, press it into a folder.
Execute the exe file in the folder.



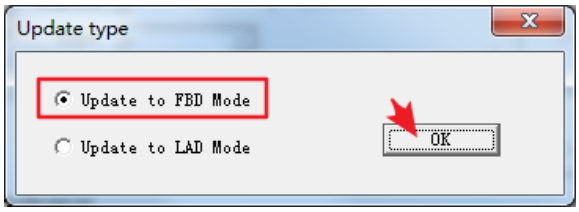
3. Select the com port of the programming cable (you need to set the BPS of PLC com0 to 9600, RTU), and then click the ‘Open’ button.



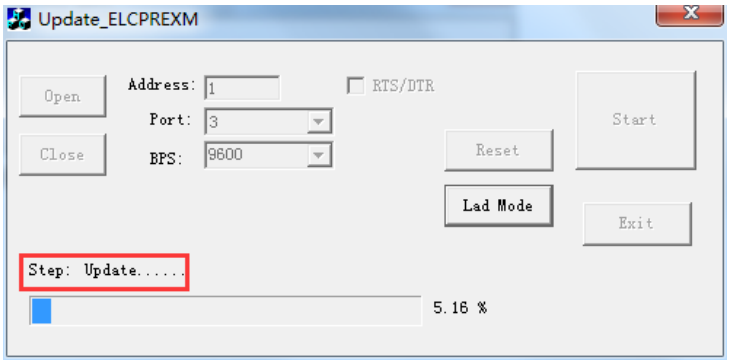
See below:



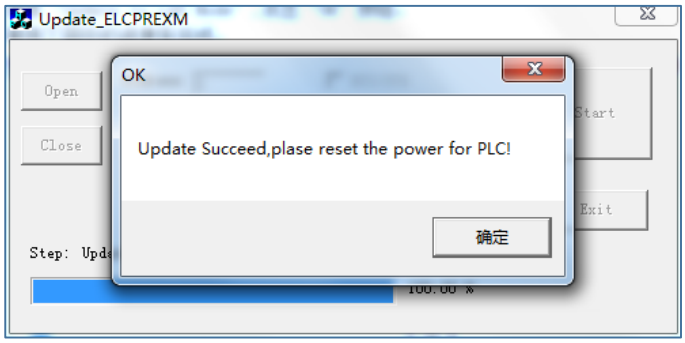
4. Then click the ‘Start’ button, and the following prompt will pop up:



5. Select ‘Update to FBD Mode’ and click the ‘OK’ button.
Wait for the progress bar in the figure below to complete.



6. After the update is completed, the following prompt will appear.



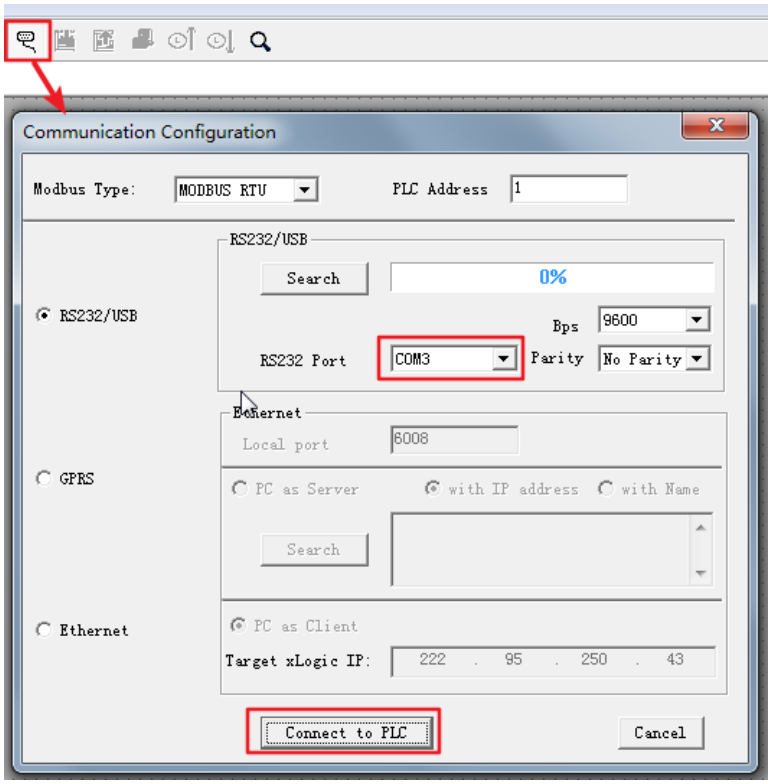
7, Power off the PR-12DC-DA-R and then power on and restart, and the LCD will display

No
Program

Now this PLC works in FBD mode.

(2) PR-14, 18, 24 series, EXM-12DC-DA-RT-WIFI

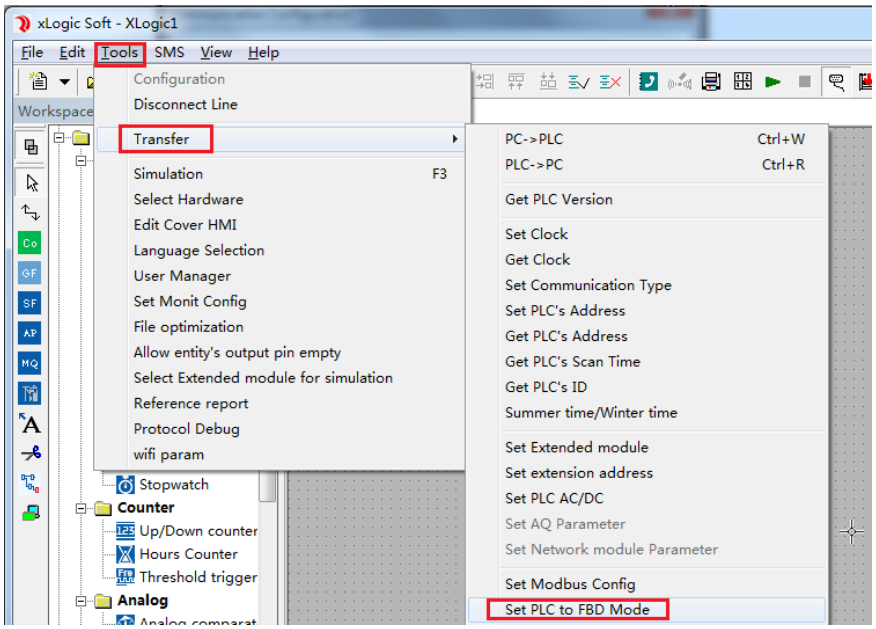
1. Open the xLogic software and select the COM port of the programming cable, as shown below:



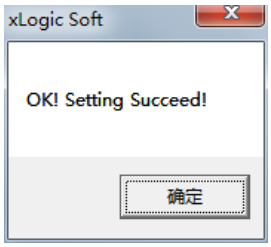
After the connection is successful, the gray invalid tool button on the xLogic software becomes valid.



2. Follow the path in the figure below to find the ‘Set PLC to FBD Mode’ menu, and then click.



Then the following picture prompt will pop up.



At this time, the PLC will automatically restart, and it will run in FBD mode after restarting.

(3) PR-12N, 18N, 26N series

These models do not require mode conversion, and programs in xLogic software and xLadder software can be downloaded directly to the PLC.