DAUDIN GFGW-RM01N HMI Modbus TCP Connection Instruction Manual

Contents

DAUDIN GFGW-RM01N HMI Modbus TCP Connection

Product Information

The product is a remote I/O module configuration list that includes various components:

Part No.	Specification
GFGW-RM01N	Modbus TCP-to-Modbus RTU/ASCII, 4 Ports
GFMS-RM01S	Master Modbus RTU, 1 Port
GFDI-RM01N	Digital Input 16 Channel
GFDO-RM01N	Digital Output 16 Channel / 0.5A
GFPS-0202	Power 24V / 48W
GFPS-0303	Power 5V / 20W

The gateway is used externally to connect with Beijer HMI's communication port (Modbus TCP). The main controller is responsible for managing and dynamically configuring I/O parameters. The power module is a standard component that can be chosen based on user preference.

Product Usage Instructions

To connect to Beijer HMI, follow these steps:

1. Ensure that the module is powered and connected to the gateway module using an Ethernet cable.
2. Launch the i-Designer software.
3. Select "M Series Module Configuration".
4. Click on the "Setting Module" icon.
5. Enter the "Setting Module" page for M-series.
6. Select the mode type based on the connected module.
7. Click on "Connect".
8. Configure the Gateway Module IP Settings (Note: The IP address must be in the same domain as the controller equipment).
9. Set Group 1 as Slave and set the gateway to use the first set of RS485 ports to connect to the main controller (GFMS-RM01N).

Remote I/O Module Configuration List

Part No.	Specification	Description
GFGW-RM01N	Modbus TCP-to-Modbus RTU/ASCII, 4 Ports	Gateway
GFMS-RM01S	Master Modbus RTU, 1 Port	Main Controller
GFDI-RM01N	Digital Input 16 Channel	Digital Input
GFDO-RM01N	Digital Output 16 Channel / 0.5A	Digital Output
GFPS-0202	Power 24V / 48W	Power Supply
GFPS-0303	Power 5V / 20W	Power Supply

Product Description

1. The gateway is used externally to connect with Beijer HMI's communication port (Modbus TCP)
2. The main controller is in charge of the management and dynamic configuration of I/O parameters and so on.
3. The power module is standard for remote I/Os and users can choose the model or brand of power module they prefer.

Gateway Parameter Settings

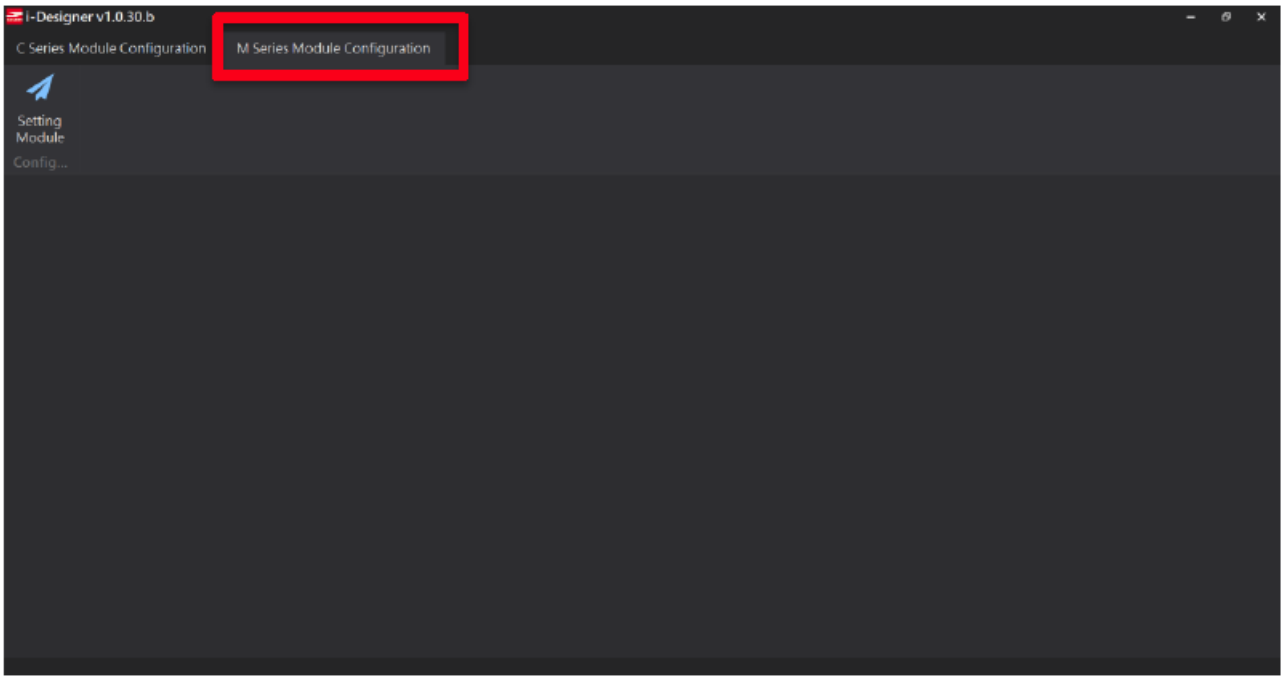
This section details how to connect to Beijer HMI. For detailed information, please refer to the iO-GRID M Series Product Manual

i-Designer Program Setup

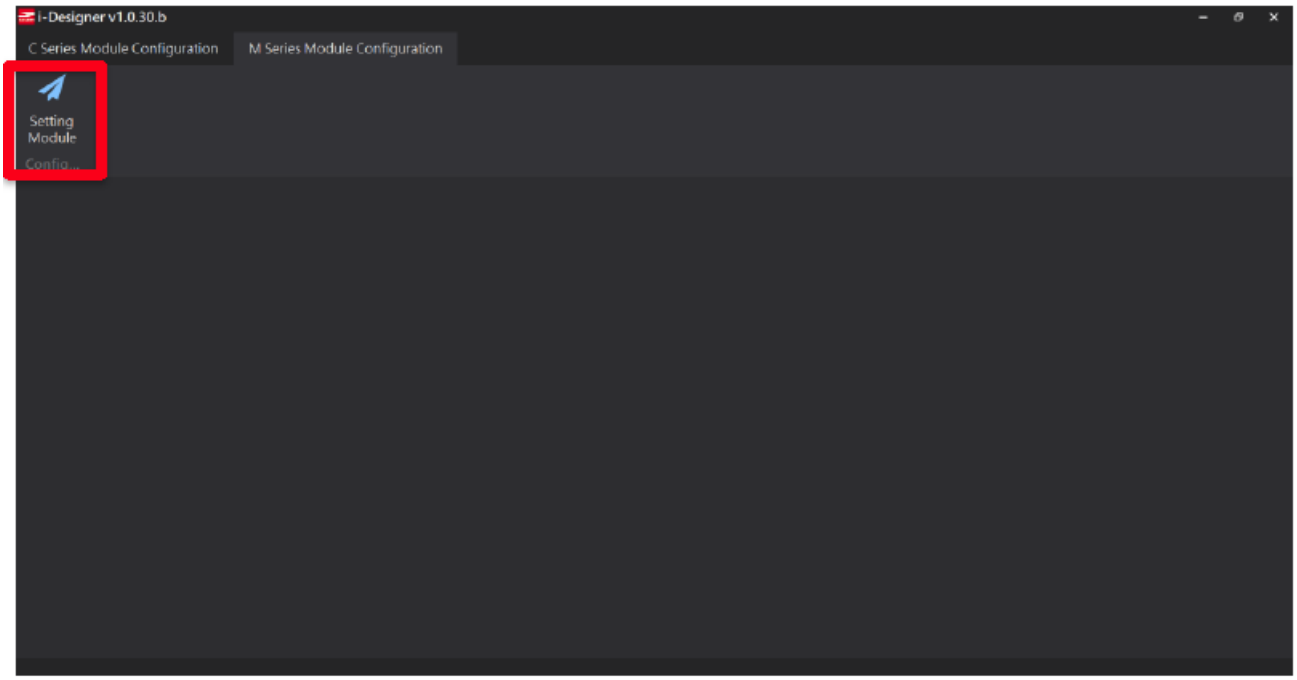
1. Make sure that the module is powered and connected to the gateway module using an Ethernet cable

2. Click to launch the software

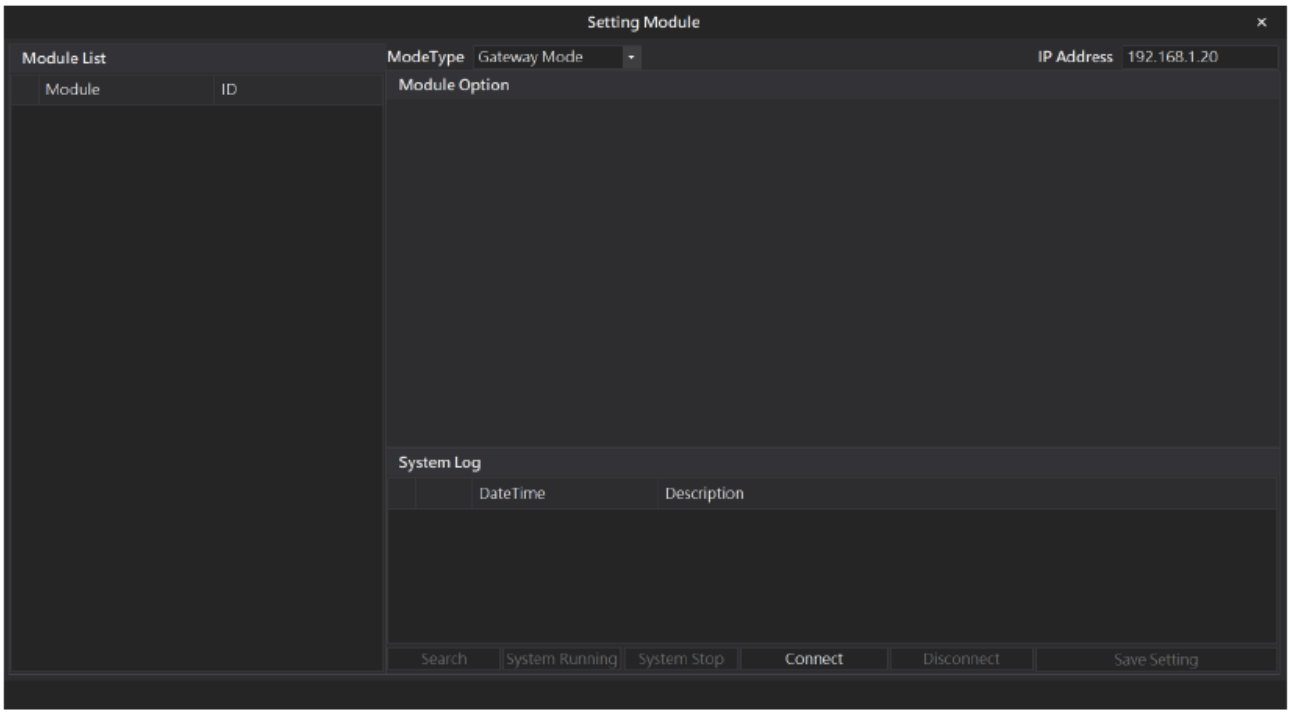
3. Select "M Series Module Configuration"



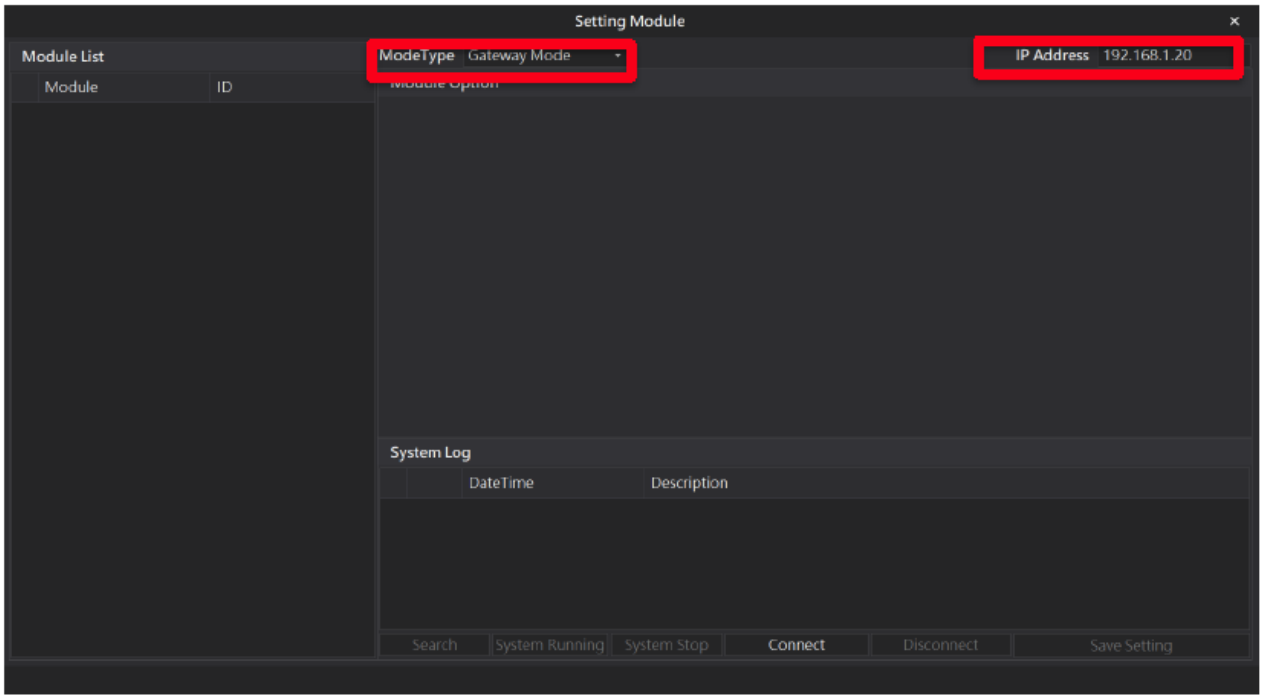
4. Click on the “Setting Module” icon



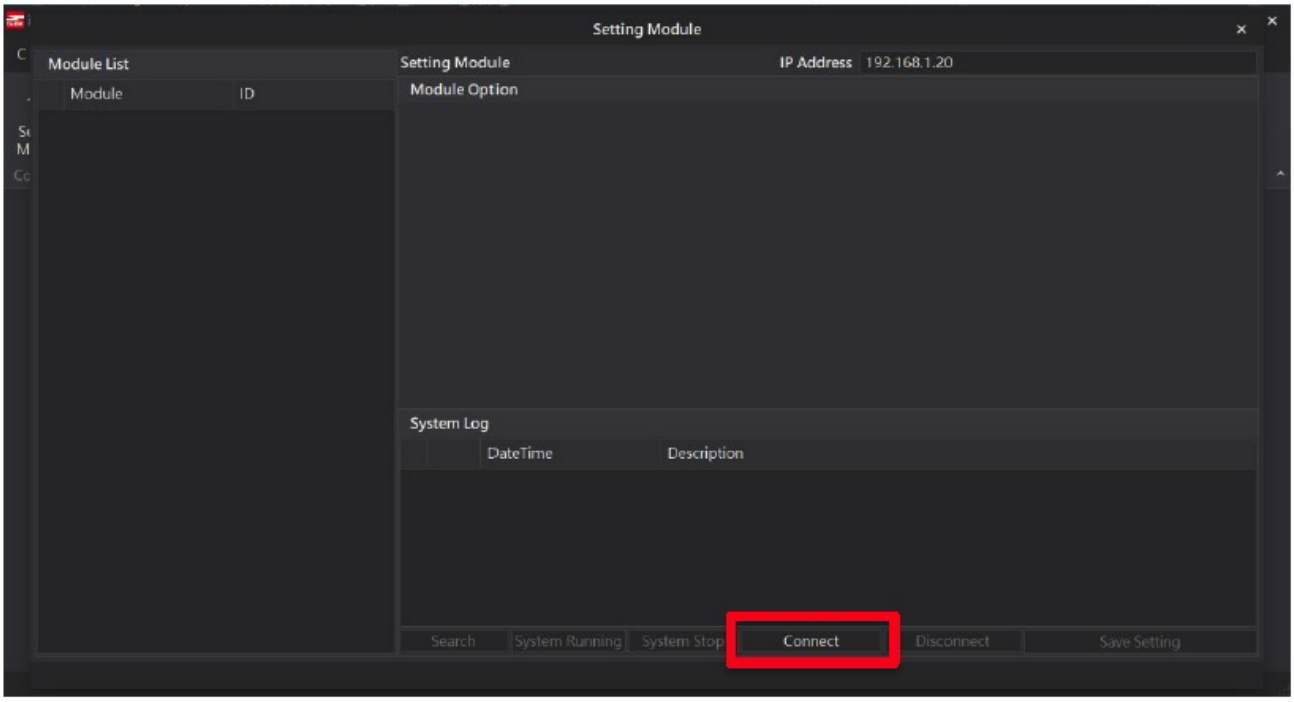
5. Enter the “Setting Module” page for M-series



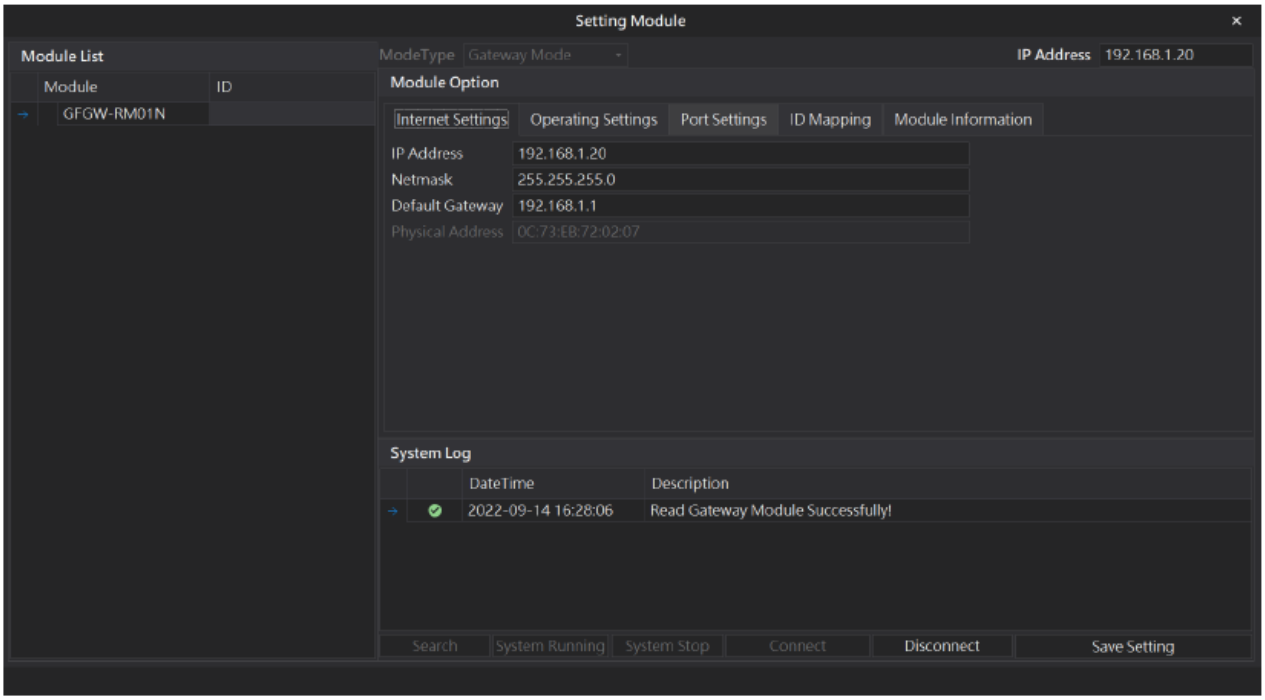
6. Select the mode type based on the connected module



7. Click on “Connect”

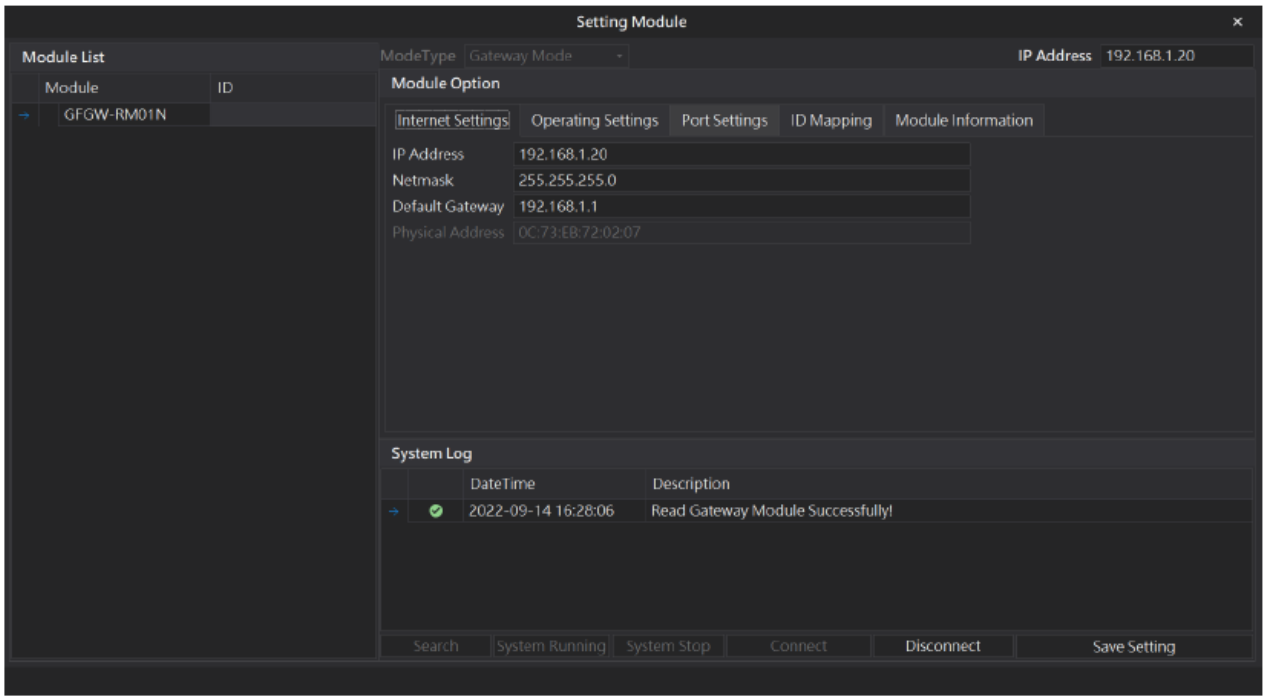


8. Gateway Module IP Settings



- **Note:** The IP address must be in the same domain as the controller equipment

9. Gateway Module Operational Modes



10. **Note:** Set Group 1 as Slave and set the gateway to use the first set of RS485 port to connect to the main controller (GFMS-RM01N)

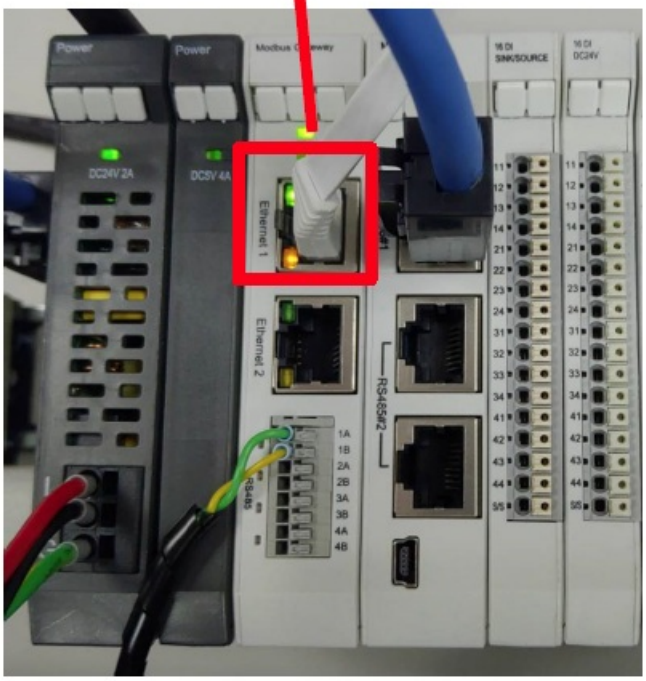
Beijer HMI Connection Setup

This chapter explains how to use the iX Developer program to connect Beijer HMI to the gateway and add a remote I/O. For detailed information, please refer to iX Developer User Manual

Beijer HMI Hardware Connection

1. The connection port is on the right at the bottom of the machine. There are LAN A and LAN B

II. Connect the port at the botto n of the machine to the gateway's port

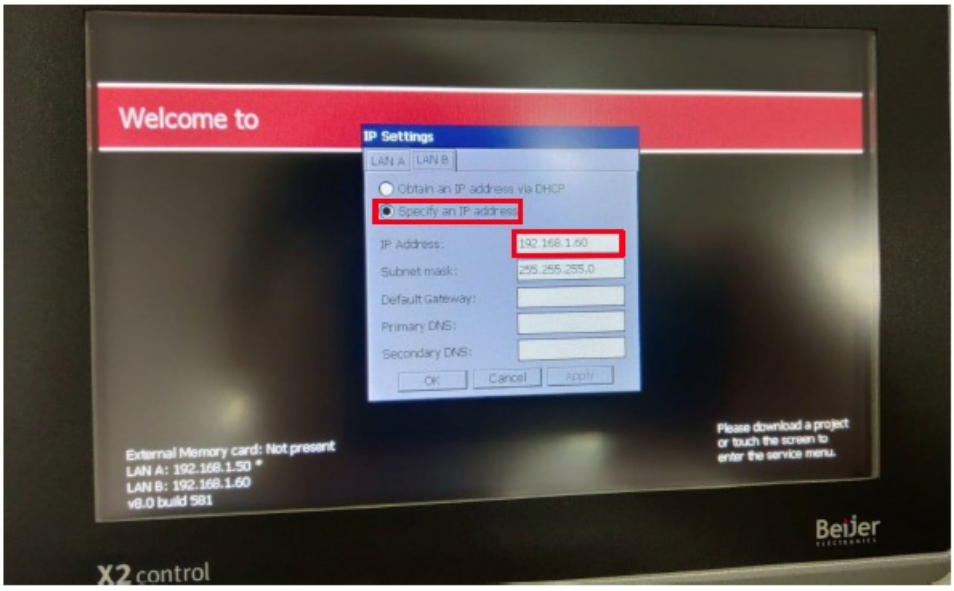


Beijer HMI IP Address and Connection Setup

1. Once HMI is powered, press on the HMI screen to enter the service menu and then click on "IP Settings".

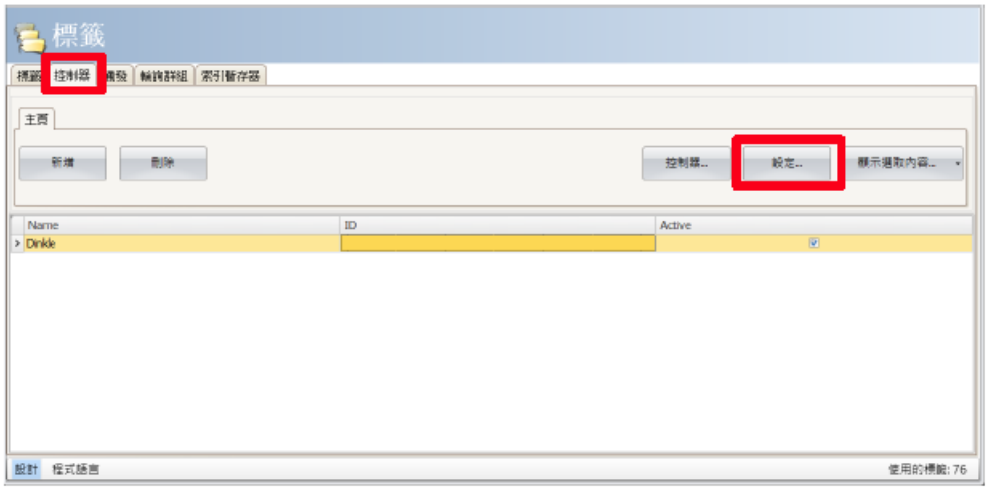
2. Click on "Specify an IP Address" and set "IP Address" to the same domain as the gateway domain at

192.168.1.XXX.

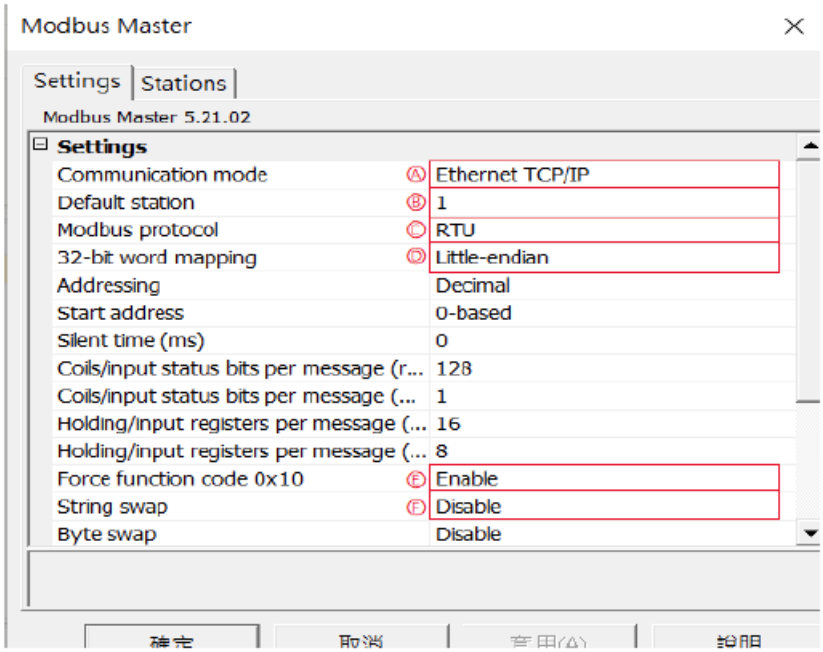


3. Launch iX Developer and select “MODICON” and “Modbus Master” to add a new controller

4. Click on the “Controller” tab to enter the controller setup page. Select the controller and then click on “Settings”

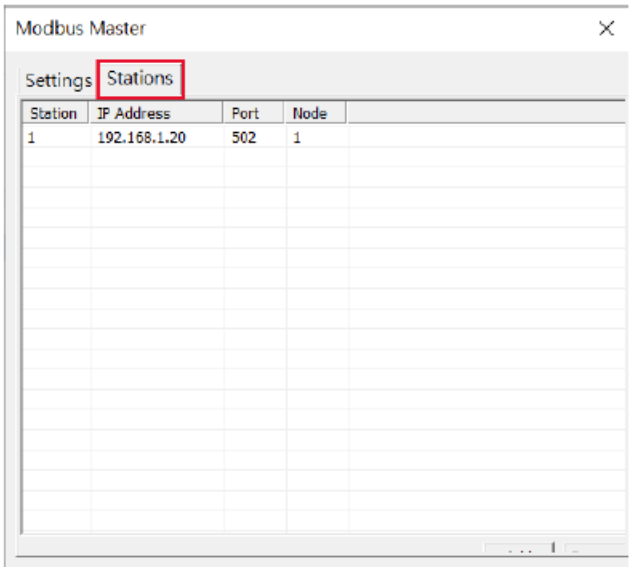


5. Connection method setup

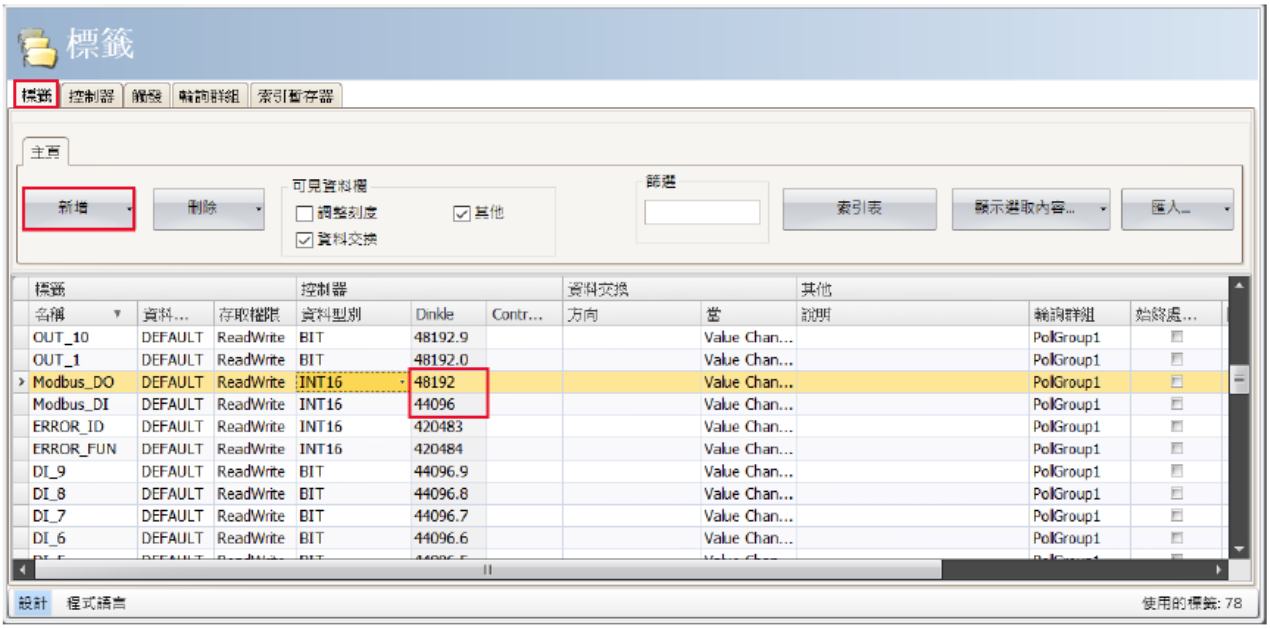


- From the “Communication mode” drop-down menu, select “Ethernet TCP/ IP”
- Setup the default station number
- From the “Modbus protocol” drop-down menu, select “RTU”
- From the “32-bit World mapping” drop-down menu, select “Little-endian”
- From the “Force function code 0x10” drop-down menu, select “Enable”
- From the “String swap” drop-down menu, select “Disable”

6. Click on “Stations” and set the “Station” and “IP Address” the same as the gateway



7. Click on “Tab” to enter the tab setting page. Next, click on “New” and set up the tab register’s location



- iO-GRID M's first GFDI-RM01N has the initial address at 44096
- iO-GRID M's first GFDO-RM01N has the initial address at 48192

Documents / Resources

	DAUDIN GFGW-RM01N HMI Modbus TCP Connection [pdf] Instruction Manual GFGW-RM01N HMI Modbus TCP Connection, GFGW-RM01N, HMI Modbus TCP Connection, Modbus TCP Connection, TCP Connection, Connection