Remote I/O Controller

EZI-10 User Manual

Version 1.6

Sollae Systems Co., Ltd.

http://www.ezTCP.com

This symbol, found on your product or on its packaging, indicates that this product should not be treated as household waste when you wish to dispose of it. Instead, it should be handed over to an applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences to the environment and human health, which could otherwise be caused by inappropriate disposal of this product. The recycling of materials will help to conserve natural resources. For more detailed information about the recycling of this product, please contact your local city office, household waste disposal service or the retail store where you purchased this product.

Contents

1 Overview ..... - 4 -

1.1 Overview ..... - 4 -
1.2 Features ..... - 4 -
1.3 Components ..... - 5 -
1.4 Application Diagrams ..... - 5 -
1.5 Specification ..... - 7 -
1.5.1 Hardware ..... - 7 -
1.5.2 Software ..... - 7 -
1.6 LED indicators ..... - 8 -
1.6.1 RJ45 ..... - 8 -
1.6.2 ISP Switch ..... - 8 -
1.7 Interface ..... - 9 -
1.7.1 Input Port ..... - 9 -
1.7.2 Output Port ..... - 10 -
1.7.3 Ethernet Interface ..... - 11 -
1.7.4 Power ..... - 11 -

2 Getting Started ..... - 12 -

2.1 Installation Method ..... - 12 -
2.1.1 Checking the Communication Environment ..... - 12 -
2.1.2 Connecting to the Network ..... - 12 -
2.1.3 Configuring the Environmental Variables ..... - 12 -
2.2 Test Run ..... - 12 -
2.2.1 Changing IP Address of PC ..... - 13 -
2.2.2 Installing EZI-10 ..... - 13 -
2.2.3 Configuring EZI-10 ..... - 13 -
2.2.4 HTTP Test ..... - 14 -
2.2.5 Modbus/TCP Test ..... - 16 -

3 Configuration ..... - 17 -

3.1 IP Address and Environmental Variables ..... - 17 -
3.2 Configuring with ezConfigIO ..... - 17 -
3.2.1 ezConfigIO ..... - 17 -
3.2.2 Buttons of ezConfigIO ..... - 18 -
3.2.3 Parameters of ezConfigIO ..... - 18 -

4 System Management ..... - 20 -

4.1 Operation Mode ..... - 20 -
4.1.1 Normal mode ..... - 20 -
4.1.2 ISP Mode ..... - 20 -
4.1.3 Network Scan Mode ..... - 20 -
4.1.4 Comparison between two modes ..... - 21 -
4.2 Upgrading Firmware ..... - 21 -
4.3 Checking current status ..... - 23 -
4.3.1 Status on ezConfigIO ..... - 23 -

5 Other Options ..... - 24 -

5.1 Security ..... - 24 -
5.1.1 Setting Password ..... - 24 -
5.1.2 Allowed IP address ..... - 24 -
5.2 Factory Reset ..... - 25 -
5.2.1 Initialization with ISP button ..... - 25 -

6 Technical Support and Warranty ..... - 26 -

6.1 Technical Support ..... - 26 -
6.2 Warranty ..... - 26 -
6.2.1 Refund ..... - 26 -
6.2.2 Free Repair Services ..... - 26 -
6.2.3 Charged Repair Services ..... - 26 -

7 Precaution and Exemption from Liability ..... - 27 -

7.1 Precaution ..... - 27 -
7.2 Exemption from Liability ..... - 28 -
7.2.1 English version ..... - 28 -
7.2.2 French version ..... - 28 -

8 History ..... - 31 -

1 Overview

1.1 Overview

Along with the development of the Internet, the demand for data communication functions has increased recently. Data communication over the Internet requires using TCP/IP, the Internet communication protocol. That is to say, in order to connect a system to the Internet, TCP/IP protocol must be implemented. It is possible to implement TCP/IP by directly implementing the protocol, porting public TCP/IP, or using Operating System (OS). However, all these methods impose burdens on the developer in time, cost, and technology.

EZI-10 uses Modbus/TCP and HTTP to provide users with ability to control and monitor remote digital I/O controllers. Therefore, with EZI-10, remote I/O devices can easily be controlled and monitored at the same time.

1.2 Features

- Remote I/O controller
- 1 x Digital Input Port (photo-coupler interface)
- 1 x Digital Output Port (relay interface)
- Supports Modbus/TCP and HTTP
- Easy configuration program (ezConfigIO)

1.3 Components

- EZI-10
- 5V Power Adapter(optional)

1.4 Application Diagrams

- 1 to 1 I/O Monitoring and Controlling

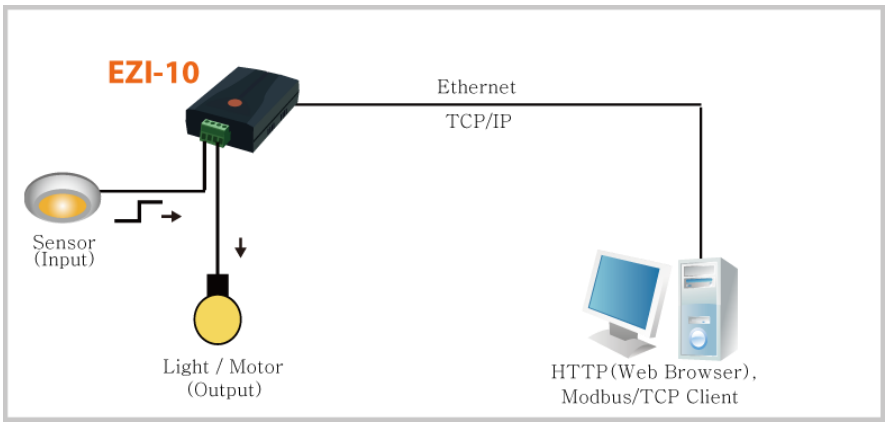

Figure 1-1 1 to 1 I/O Monitoring and Controlling

- Local Network I/O Monitoring and Controlling

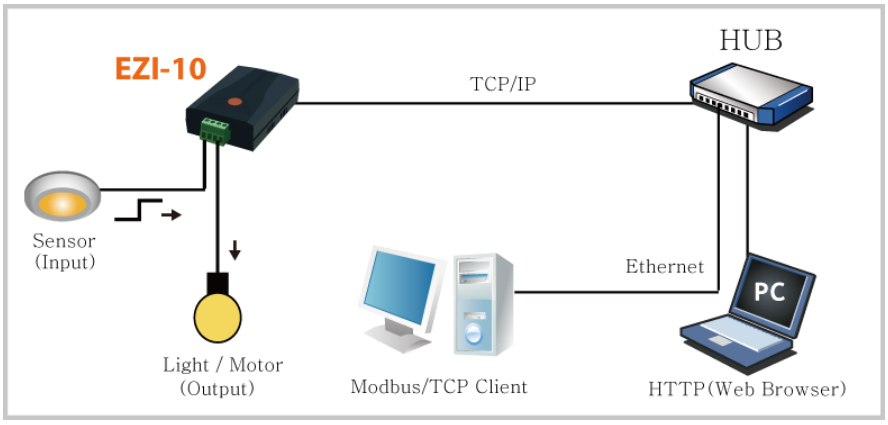

Figure 1-2 Local Network I/O Monitoring and Controlling

- Internet I/O Monitoring and Controlling

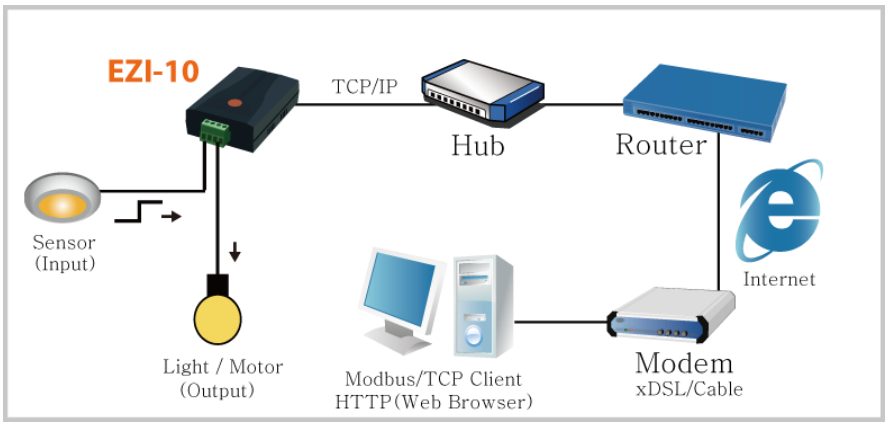

Figure 1-3 Internet I/O Monitoring and Controlling

- Automatic Remote Switch (Internet Switch)

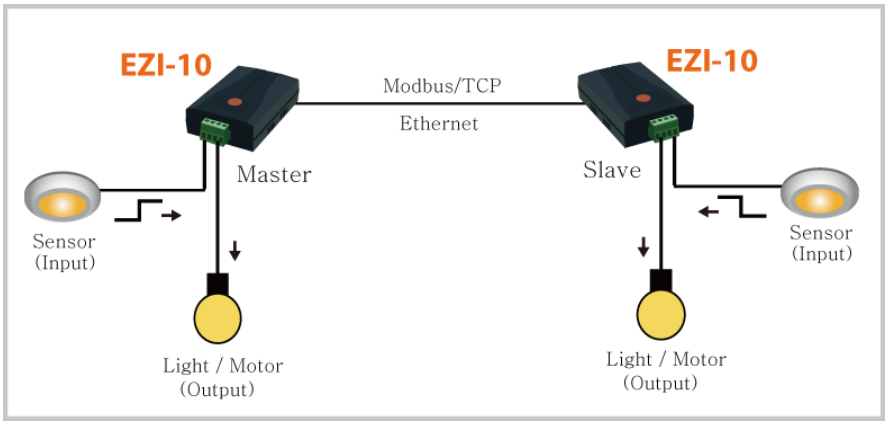

Figure 1-4 Automatic Remote Switch

1.5 Specification

1.5.1 Hardware

Power	Input Voltage	5V (±5%)
	Current	91mA typical
Dimension	96mm x 57mm x 24mm	
Weight	about 78g	
Interface	Input Port	1 Port Photo Coupler
	Output Port	1 Port Relay
	Network	10 Base-T (RJ45)
Temperature	Operate: 0 ~ 55℃ / Storage: -40 ~ 85℃	
Approvals	MIC	
RoHS	RoHS Compliant	

Table 1-1 Hardware specification

1.5.2 Software

Protocols	TCP, UDP, IP, ICMP, ARP, DHCP, Modbus/TCP, HTTP	
Operation mode	Normal	normal communication mode
	ISP	F/W upgrade mode
Communication Mode	Modbus/TCP (Master/Slave, Active/Passive), HTTP	
Utilities	ezConfigIO	Configuration utility via LAN
	hotflash	Firmware download utility via TFTP

Table 1-2 Software specification

☞ ***You can download the firmware from our website (http://www.eztcp.com).***

1.6 LED indicators

1.6.1 RJ45

There are yellow and green LEDs in the RJ-45 connector of EZI-10. The yellow LED indicates that IP address status of EZI-10 and packet transmissions from LAN port. And the green LED turns on when EZI-10 connected a hub and blinks when packet receptions.

Mode	Color	Status	Description
Normal mode	Green	Blinks in every second	IP is allocated but TCP connection is not established.
		Blinks 4 times at once	IP is not allocated – Repetition of [after blinking 4 times for 150ms, turns off during 850ms]
		On	Establishing Modbus/TCP Connection
		Blinks	Transmitting data to LAN
	Green	On	Being connected with LAN
		Blinks	Receiving data from LAN
ISP mode	Green /Yellow	Off	Entering ISP mode
Network Scan mode	Yellow	Blinks twice at once	None heavy network traffic
		Blinks 3 times at once	Heavy network traffic
	Green	On	Being connected with LAN

Table 1-3 System LED

1.6.2 ISP Switch

There is an ISP switch on the side. If this switch is push 20ms~1s, it operates as Serial Configuration Mode. If this switch is push over 3 seconds, EZI-10 operates as ISP mode. User can do firmware download to the EZI-10 in the ISP mode. Please refer to 4.2 for more information on firmware download.

1.7 Interface

1.7.1 Input Port

Since EZI-10 input port is isolated by photo-couplers, users may connect the machine regardless of its polarity. The circuit of the input port is shown in the below. It is the part where the [EXTERNAL INPUT1] and [EXTERNAL INPUT2] are interfaced with the user device.

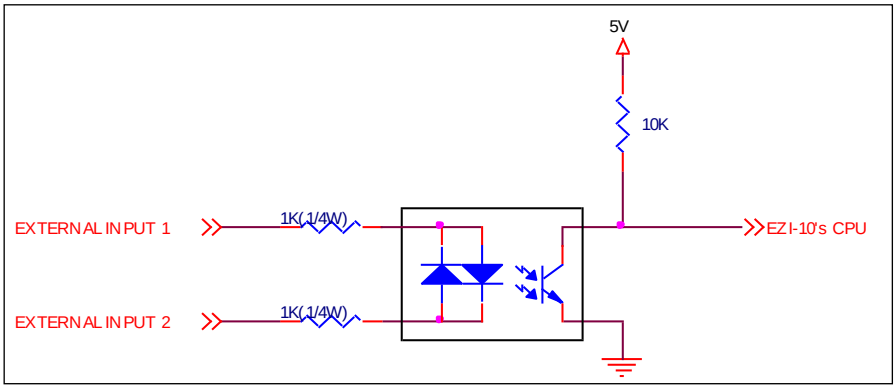

Figure 1-5 Input Port Interface

The specifications of the input port are as the following:

Max. Input Voltage	DC24V		
V_{IH}	Min. 2.2V	H	1
V_{IL}	Max. 1.8V	L	0

Table 1-4 Voltage Feature of Input Port

Since the input port is interfaced with a 5mm terminal block, use a (-) shaped screwdriver to connect it with the user device.

- Valid Time

  EZI-10 will only recognize input port signals that last for the [Valid Time] set by the user. If the signal is not maintained during the designated [Valid Time], the input signal will be ignored.

  The [Valid Time] is used for Modbus/TCP, HTTP and other functions provided by EZI-10. The unit used for the [Valid Time] is 1ms. However, since the accuracy is only guaranteed in 10ms, the designated values will round down in units of 10ms according to the designated values by the users.

- Input Port Type

  Basically, input ports of EZI-10 are Open Collector type. The type needs two wires which have difference of voltage level for making HIGH signal.

1.7.2 Output Port

EZI-10 output port is interfaced via relay as shown below. It is the part where the [EXTERNAL OUTPUT1] and [EXTERNAL OUTPUT2] are interfaced with the user device.

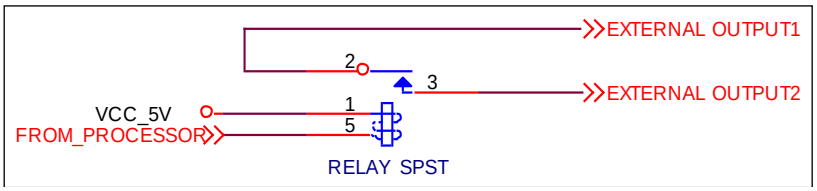

Figure 1-6 Output Port Interface

The output port will perform the following actions

Value	Relay contact
0	OFF
1	ON

Table 1-5 Status of Output Port

The allowed electrical current based on voltage conditions of the output port are as the following:

Voltage Condition	Allowed current
DC28V	5A

Table 1-6 Allowed Values of Current

Since the output port is interfaced with a 5mm terminal block, use a (-) shaped screwdriver to connect it with the user device.

- Delay

  EZI-10 will send output value to the output port after waiting for [Delay].

  In order to do so, the signal value must last for [Delay] seconds. If the output value does not last for the [Delay] seconds, EZI-10 will not send that signal to the output port. If the [Delay] value is set as 0, EZI-10 will send the output value to the output port immediately. The [Delay] is used for Modbus/TCP, HTTP and other functions provided by EZI-10. The unit used for the [Delay] is 1ms. However, since the accuracy is only guaranteed in 10ms, the designated values will round down in units of 10ms according to the designated values by the users.

1.7.3 Ethernet Interface

Network part of EZI-10 is configured with Ethernet. So, what you have to do is only to connect UTP cable.

Each piece of Ethernet equipment has unique hardware addresses, and EZI-10 also has factory-set hardware address (which is called MAC address)

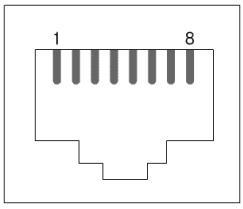

Figure 1-7 RJ45 Ethernet connector

Number	Name	Direction
1	Tx+	Output
2	Tx-	Output
3	Rx+	Input
4	-	-
5	-	-
6	Rx-	Input
7	-	-
8	-	-

Table 1-7 Ethernet port pin description

1.7.4 Power

DC5V is used for EZI-10 and the specification is below:

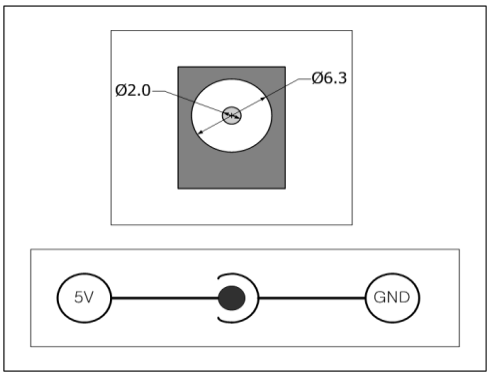

Figure 1-8 DC 5V Power Jack

2 Getting Started

2.1 Installation Method

You can install EZI-10 in the following steps.

Title	Item	Sub-item
1. Checking the communication environment	Check items	IP address environment
		Serial port parameters
		Application program to be used
2. Connecting to the network	Check method	Check the LINK LED
3. Configuring the environmental parameters	Configuration method	Set by ezConfigIO, a program for configuration through the network.
4. Test run	Check method	Modbus/TCP or HTTP
5. Application to the system	-	-

Table 2-1 Installation steps of EZI-10

2.1.1 Checking the Communication Environment

Before installing EZI-10, check the network environment where EZI-10 is to be installed, including the followings matters:

- IP address environment (local IP, subnet mask, gateway, DHCP/PPPoE etc.)
- Application program protocol to be used (Modbus/TCP, Master/Slave, etc.)

2.1.2 Connecting to the Network

Connect power to EZI-10, and connect EZI-10 either directly to the Ethernet port of the PC where test is to be performed or to the network (hub) to which the PC is connected.

2.1.3 Configuring the Environmental Variables

When network connection is completed, configure the environmental variables such as IP address related items and communication mode related items through the LAN using "ezConfigIO" the environmental variable configuration program.

2.2 Test Run

You can perform test run according to the following orders. The test run described here is based on the assumption that the IP address of the PC is set to 10.1.0.2.

2.2.1 Changing IP Address of PC

You should change or add an IP address of your PC as follows:

IP Address	10.1.0.2
Subnet Mask	255.0.0.0
Gateway IP Address	-

Table 2-2 IP address of PC

2.2.2 Installing EZI-10

Connect the LAN cable to the hub to which the PC is connected or directly to the PC, and the supplied EZI-10 power adapter to EZI-10 for power supply. If the LAN cable has been correctly connected when power is supplied, green LED of RJ45 connector will turn on.

2.2.3 Configuring EZI-10

Configure EZI-10 setting using ezConfigIO, the ezTCP configuration program, as follows. Run ezConfigIO, and click [Search All] button in the ezConfigIO window. And, ezConfigIO program will search all EZI-10s on the local network. When ezTCP is searched, MAC address of the ezTCP is displayed on the [Search Result] window (The MAC address is indicated at the bottom of the product case). Select the corresponding MAC address, and set the variables considering your network environment. When no ezTCP is found, check the Windows firewall. If you press [Windows Firewall] button in the ezConfigIO, you can see the Windows Firewall menu directly. For simple test, we recommend that the variables keep default values as shown in the below table.

Parameters		Values
Network	Local IP Address	10.1.0.1
	Subnet Mask	255.0.0.0
Option	MAC Address Search	Checked
	IP Address Search	Checked
TCP/IP	Communication Mode	HTTP
	Local Port	80
	Allowed IP Address	0.0.0.0
Digital Input / Output	Valid Time	0
	Delay Time	0
	Initial State	Off

Table 2-3 Default values of major parameters

2.2.4 HTTP Test

EZI-10 supports HTTP, so it is possible to access to EZI-10 through web browsers like MS Internet Explorer, Google Chrome, Mozilla Firefox and etc.

Setting of EZI-10's parameters for simple test are followed

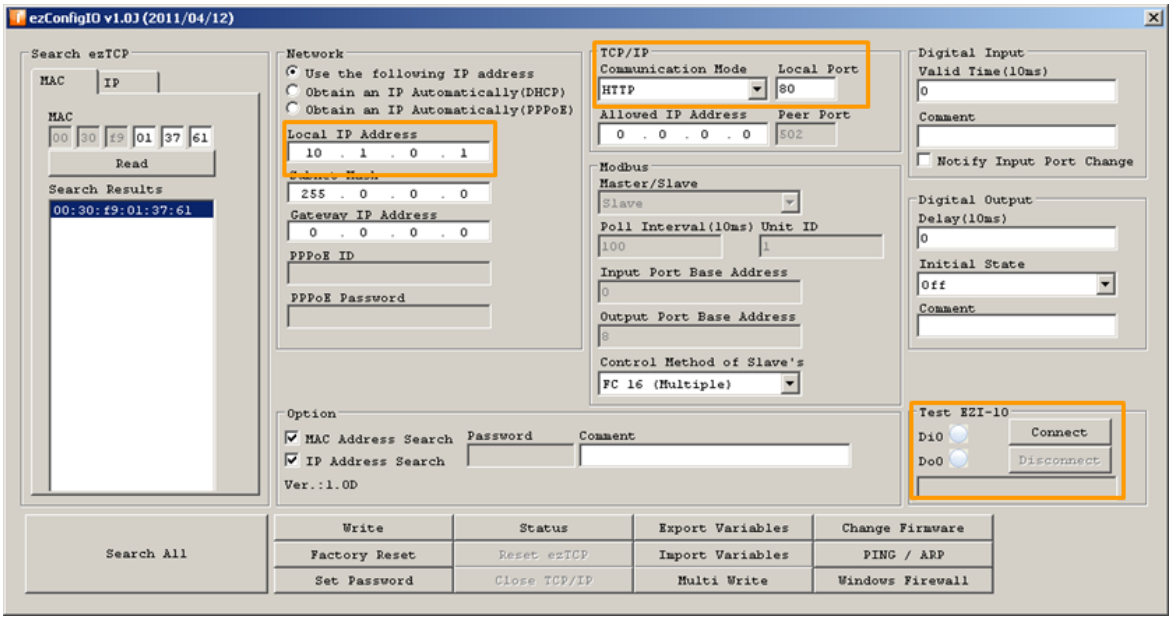

Figure 2-1 Setting for HTTP test

- Network part

  Local IP Address can be set according to your network environment.

- TCP/IP part

  Select [HTTP] as [Communication Mode], and check if the local port number is 80.

- EZI-10 Test Program

  On the right side of bottom, there is EZI-10 Test program. Users can do the test with HTTP or Modbus/TCP using this program.

When the values are properly set, if you press the [Connect] button, a window will be created like below figure.

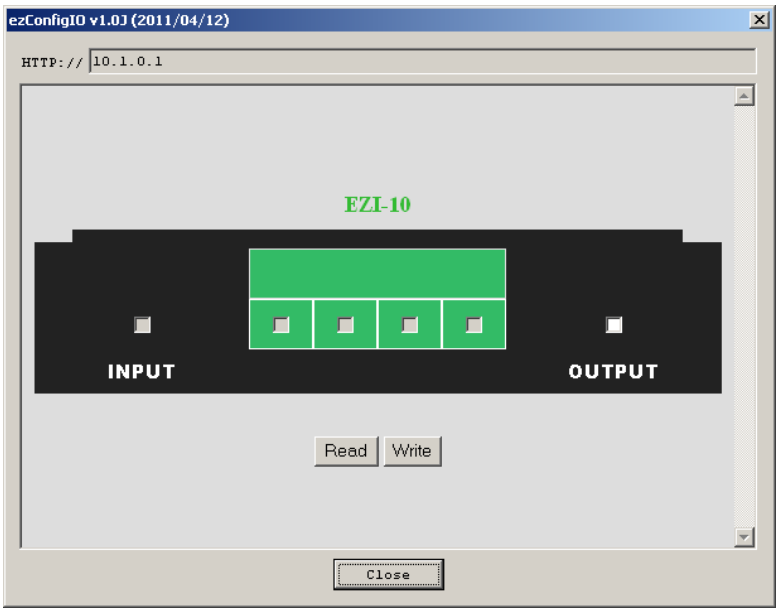

Figure 2-2 HTTP Test via ezConfigIO

- Verify the operations with [Read] and [Write] buttons.

☞ ***Users also can do that via web browsers like MS Internet Explorer, Google Chrome and etc.***

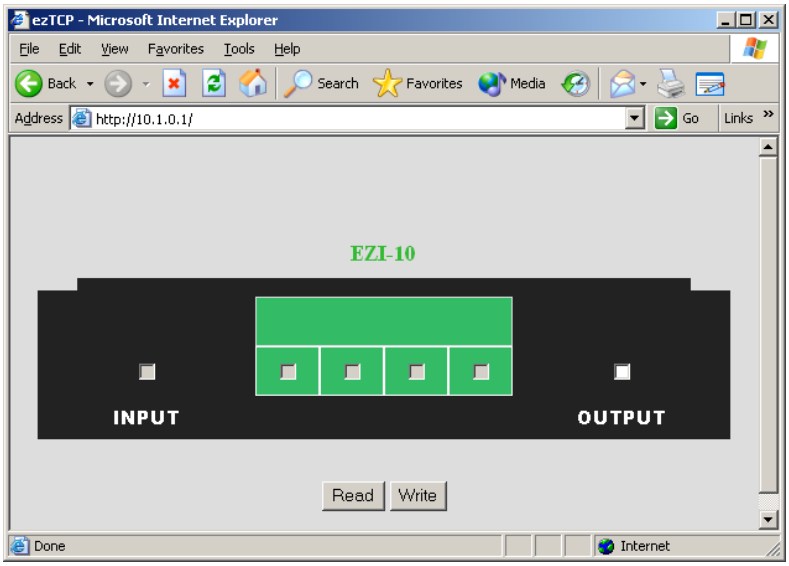

Figure 2-3 HTTP Test via MS Internet Explorer 6

2.2.5 Modbus/TCP Test

Setting is followed for Modbus/TCP test. In this test, EZI-10 operates as Modbus/TCP Slave.

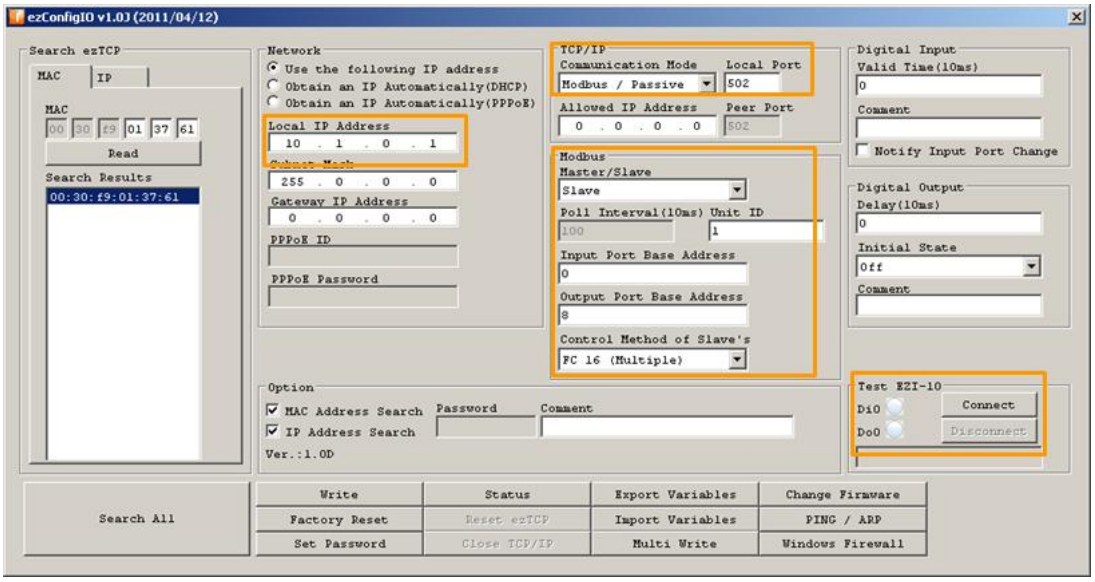

Figure 2-4 Settings for Modbus/TCP Test

- Network Part

  Local IP Address can be set according to your network environment.

- TCP/IP Part

  Select [Modbus / Passive] as a value of Communication Mod, then the local port will be set as 502 automatically.

  Check if the [Allowed IP Address] is [0.0.0.0].

- Modbus Part

  Select [Slave] on [Master / Slave] item.

  Default value of [Unit ID] is 1

  Each [Input Port Base Address] and [Output Port Base Address] should be set 0 and 8.

- Press the [Connect] button after then saving the parameters with [Write] button.

- You can see the message like this

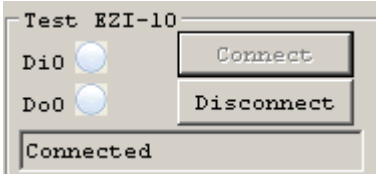

Figure 2-5 "Connected" message

3 Configuration

3.1 IP Address and Environmental Variables

For TCP/IP communication, you must set IP address related items to EZI-10.

You can set the IP address and related items by using ezConfigIO, the supplied configuration utility which allows you to configure your EZI-10 over the network.

3.2 Configuring with ezConfigIO

3.2.1 ezConfigIO

The basic environmental variables (IP address related items, serial port items, and etc.) can be set by ezConfigIO which is an integrated management tool for Windows. The ezConfigIO is operated in Microsoft Windows (Windows 2000 Pro, ME, XP Pro/Home, Vista). Following is the screen shot of ezConfigIO which is just launched.

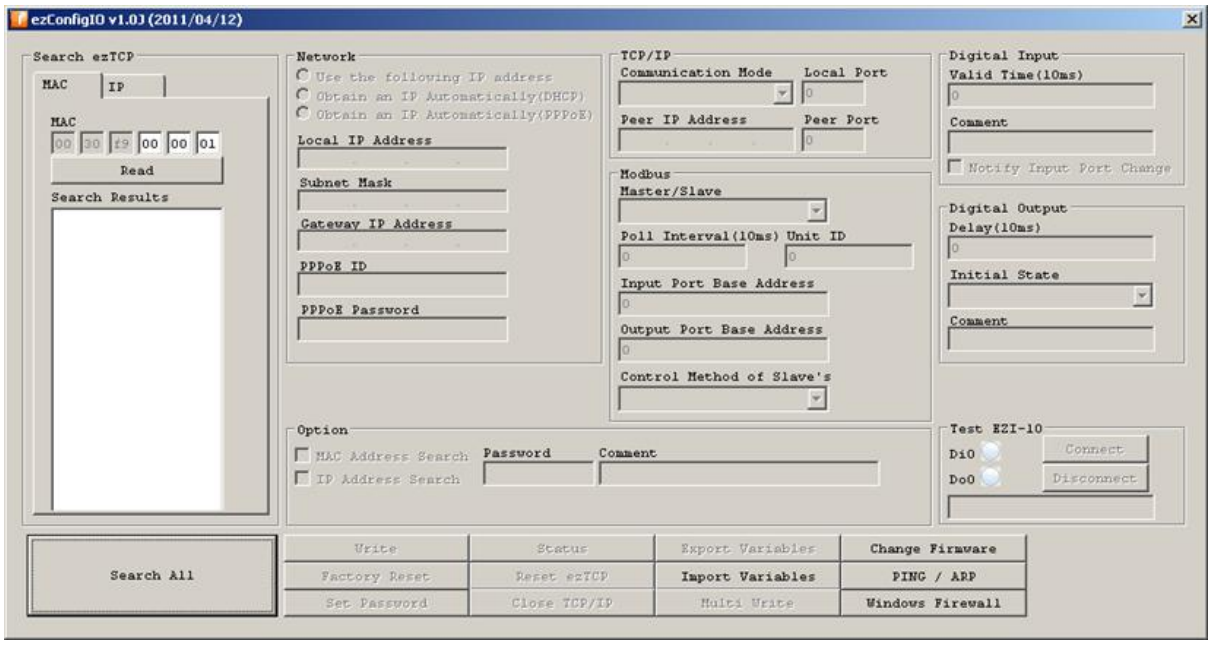

Figure 3-1 Initial window of the ezConfigIO

3.2.2 Buttons of ezConfigIO

Button	Description
Search All	Search and read the parameters of all EZI-10 which are in the local network.
Read	Read the parameters of EZI-10 with MAC or IP address
Write	Write the present settings to EZI-10
Set Password	Set or change password
Status	Check status of EZI-10 in real time.
Factory Reset	Initialize all the parameters to its default values
Change Firmware	Download Firmware of EZI-10
Export Variables	Store a set of values as a file.
Import Variables	Load values from a file made from [Export Variables]
Multi Write	Configure a set of values to one or more ezTCP
PING / ARP	Send PING request and management ARP table
Windows Firewall	Go to window which is for firewall setting.

Table 3-1 Buttons of ezConfigIO

3.2.3 Parameters of ezConfigIO

Section	Parameter		Description
Network	Use the following IP Address		Set IP address manually.
	Obtain an IP Automatically	DHCP	Obtain IP address through DHCP
		PPPoE	Obtain IP address through PPPoE
	Local IP Address		EZI-10's Local IP address
	Subnet Mask		subnet mask address
	Gateway IP Address		gateway's IP address
	PPPoE ID		Input PPPoE account's ID
	PPPoE Password		Input PPPoE account's password
Option	MAC Address Search		Enable or disable MAC address search with [Search All] button
	IP Address Search		Enable or disable IP address search with [Read] button
	Ver.		Indicate version of F/W which is used now
	Password		For input password which is set in advance
	Comment		Input comment for easy identification

TCP/IP	Communication Mode	Select method for controlling I/O Port. HTTP, Modbus/TCP Active and Passive are available.
	Allowed IP Address	Enabled only HTTP and Modbus/TCP Passive mode. It presents IP address for allow to access.
	Peer IP Address	Enabled only Active mode. Input peer's IP Address.
	Local Port	Enabled only Passive mode.
	Peer Port	Enabled only Active mode. Input peer's local port.
Modbus	Master/Slave	Select Modbus/TCP operation mode. Both Master and Slave are available.
	Poll Interval	Enabled only Master mode. Period of sending Modbus queries. (Unit: 10ms)
	Unit ID	Slave mode: EZI-10's Unit ID Master mode: EZI-10 and remote device Unit ID
	Input Port Base Address	Reference Address for Input Port
	Output Port Base Address	Reference Address for Output port
	Control Method of Slave's output ports	FC 16(Multiple) / FC 05(Single)
Digital Input	Valid Time	Valid time to recognizing input signal. (Unit: 10ms)
	Comment	Comment for input port
	Notify Input Port Change	Immediately sending status of slave's input port.
Digital Output	Delay	Delay time to reflecting output. (Unit: 10ms)
	Initial State	Initial state when EZI-10 boots up.
	Comment	Comment for output port

Table 3-2 Parameters of ezConfigIO

☞ ***For the details of using and setting Modbus/TCP, please refer to the document "Modbus/TCP of ezTCP" on the [Download] >> [Technical Documents] page of our website.***

4 System Management

4.1 Operation Mode

EZI-10 can operate in one of three modes (normal, ISP and network scan mode). Normal mode is ordinary data communication mode. ISP mode is used to download EZI-10 firmware through the Ethernet port.

4.1.1 Normal mode

The normal mode is an operation mode that EZI-10's works for normal purposes. If EZI-10 boots up without any other treatment, it works in the normal mode.

4.1.2 ISP Mode

If you press the switch on the side of the body in the normal mode over 3 seconds, it works in the ISP mode. You can download new firmware to EZI-10 with ezConfigIO or hotflash program that is a TFTP client through the Ethernet. And you can configure the EZI-10 in the ISP mode even though you forget its password or you can't access the EZI-10 because the [MAC address search] or [IP address search] function is enabled. (All security functions are disabled in the ISP mode)

4.1.3 Network Scan Mode

If network traffic is so heavy, EZI-10 may not operate normally. For figure it out, EZI-10 supports [Network Scan Mode]. This mode let you know that EZI-10 is capable of operation in your network.

To initiate this mode, you can press the ISP button less than 1 second. If the Yellow LED, which is on the RJ45 connecter, blinks twice or three times at once.

Twice blinking means the network traffic may not cause any problem to EZI-10.

Three times blinking means the network traffic has probability of causing problems. In this case, you should test with EZI-10 before applying it to your system.

4.1.4 Comparison between two modes

The following is a comparison between the normal mode and the ISP mode.

Mode	How to initiate	Description
Normal	Power on EZI-10 without pressing the ISP button	Normal communication mode
ISP	Pressing the ISP button over 3 seconds	Firmware download mode All security functions are disabled
Network Scan	Pressing the ISP button less than 1 second	Test for applying to your network.

Table 4-1 Operation Mode

4.2 Upgrading Firmware

In ISP mode, you can download a firmware (EZI-10 operation software) provided by our company. There is another thing in this mode. If you forget your password set before, you can reset it by entering this mode. In ISP mode, all the security options including disabling MAC and IP address search can be removal.

The following is the firmware downloading procedure.

- Supply power with pressing ISP button or push the button over 3 seconds, then EZI-10 will operate in ISP mode. The yellow LED will blink rapidly.
- Run ezConfigIO. Search the product and select its MAC address on the search result box. Then, press the [Change Firmware] button.

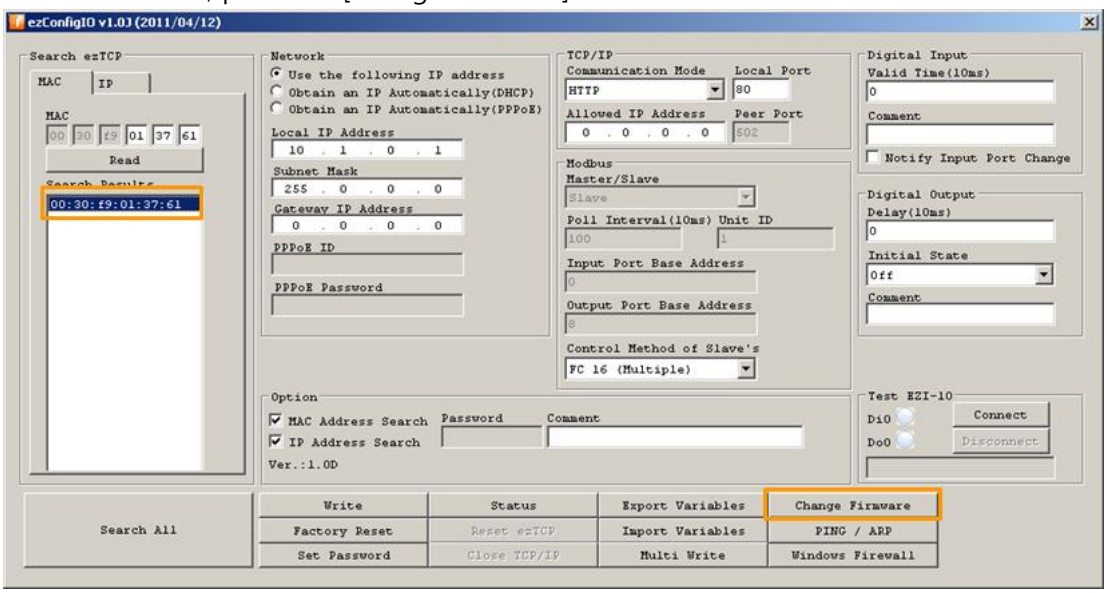

Figure 4-1 [Change Firmware] button

- You can see new windows like below figure.

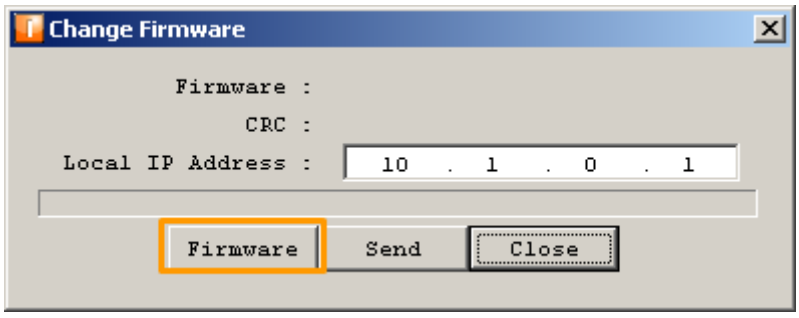

Figure 4-2 [Firmware] button for select a firmware file

- Press [Firmware] button and then, choose and select a firmware file.

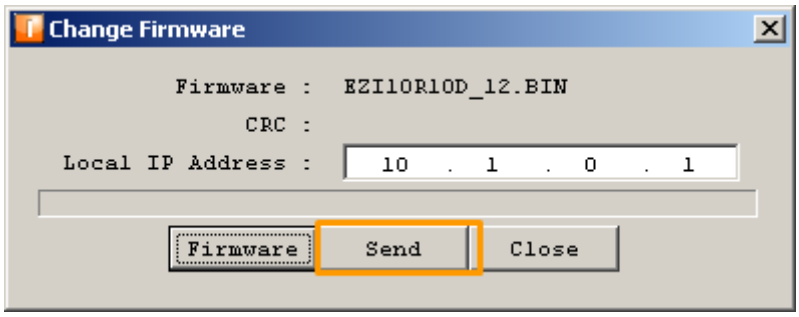

Figure 4-3 [Send] button

- Press [Send] button and wait until the download is completed.

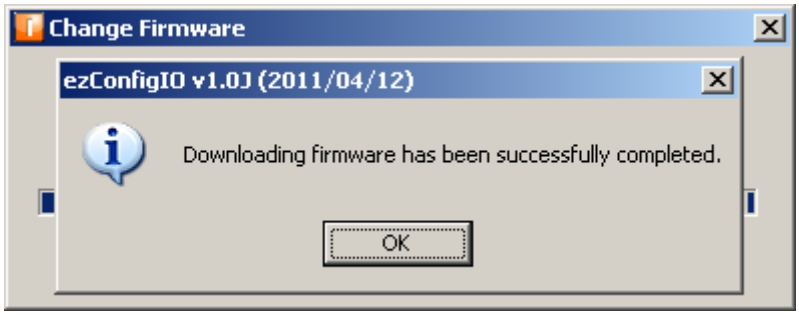

Figure 4-4 Complete message

- When the downloading is completed, EZI-10 automatically reboots and enters normal mode.

☞ ***The downloading firmware is possible with another TFTP Client like hotflash.***

4.3 Checking current status

4.3.1 Status on ezConfigIO

Users can monitor status of EZI-10 with ezConfigIO. Press the [Status] button after select your product. If you check the [Refresh Every 1 Second] option, the status will be refreshed automatically in every second.

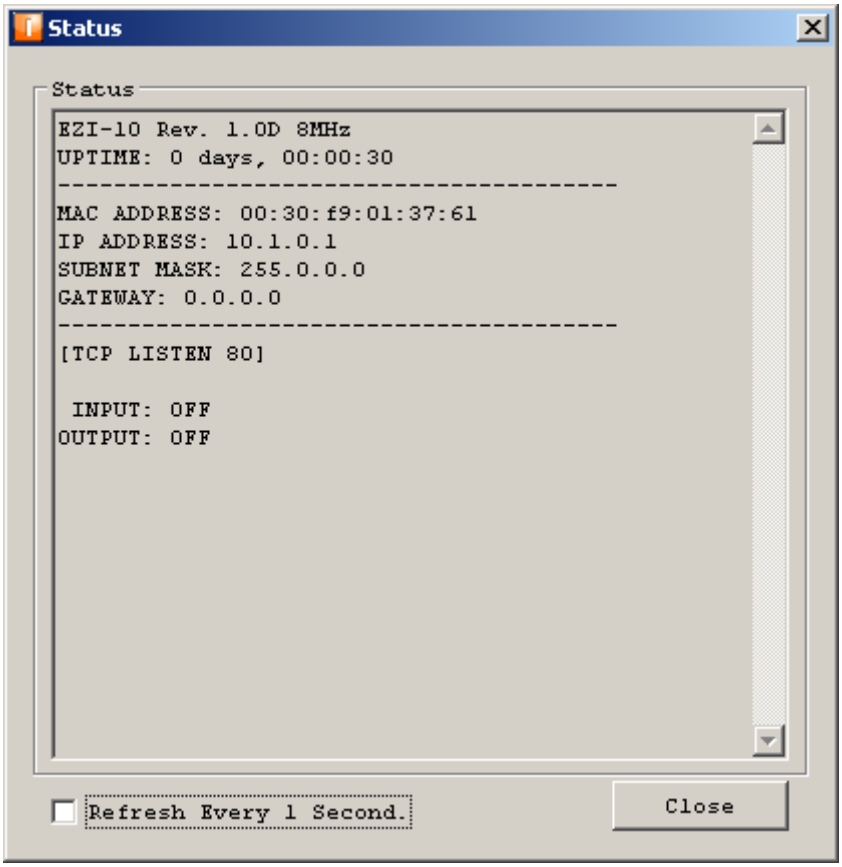

Figure 4-5 Status window of ezConfigIO

5 Other Options

5.1 Security

5.1.1 Setting Password

EZI-10 supports setting password option for blocking access from anyone who should not access to the product. The password has to be character or numeral between the number of 4 and 8 ciphers.

Once the password is set, you should remember the value and input it to the [Password] box before pressing [Write] button.

Figure 5-1 Setting Password

5.1.2 Allowed IP address

When you use HTTP or Modbus/TCP as the communication mode, EZI-10 will listen for a connection from remote hosts. This option is for designating one IP address to block accesses from other addresses.

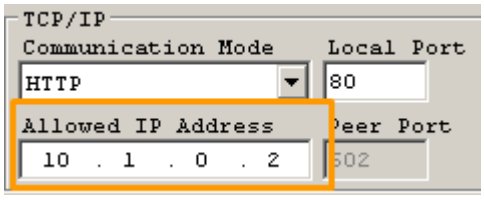

Figure 5-2 Allowed IP Address option

5.2 Factory Reset

There are two ways to initiate all the parameters to its default values. The one way is using [Factory Reset] button on ezConfigIO and the other way is using ISP switch.

Purposes of both methods are same.

5.2.1 Initialization with ISP button

To use this method, you can change the mode of EZI-10 to [Network Scan Mode]. This mode is mentioned above. To enter this mode, press the ISP button less than 1 second.

If the yellow LED is blinking twice or three times at once, the changing is succeeded. In this state, press the ISP button again over 10 seconds. If the yellow LED is blinking in every second, all the parameters will have been initiated.

6 Technical Support and Warranty

6.1 Technical Support

If you have any question regarding operation of the product, visit Customer Support FAQ corner and the message board on Sollae Systems' web site or send us an email at the following address:

- E-mail: support@eztcp.com
- Website Address for Customer Support: http://www.eztcp.com/en/support/

6.2 Warranty

6.2.1 Refund

Upon the customer's request to refund the product within two weeks after purchase, Sollae Systems will refund the product.

6.2.2 Free Repair Services

For product failures occurring within 2 years after purchase, Sollae Systems provides free repair services or exchange the product. However, if the product failure is due to user's fault, repair service fees will be charged or the product will be replaced at user's expense.

6.2.3 Charged Repair Services

For product failures occurring after the warranty period (2 years) or resulting from user's fault, repair service fees will be charged and the product will be replaced at user's expense.

7 Precaution and Exemption from Liability

7.1 Precaution

- Sollae Systems is not responsible for product failures occurring due to user's alternation of the product.
- Specifications of the product are subject to change without prior notice for performance improvement.
- Sollae Systems does not guarantee successful operation of the product if the product was used under conditions deviating from the product specifications.
- Reverse engineering of firmware and applications provided by Sollae Systems is prohibited.
- Use of firmware and applications provided by Sollae Systems for purposes other than those for which they were designed is prohibited.
- Do not use the product in an extremely cold or hot place or in a place where vibration is severe.
- Do not use the product in an environment in which humidity is high or a lot of oil exists.
- Do not use the product where there is caustic or combustible gas.
- Sollae Systems does not guarantee normal operation of the product under the conditions a lot of noise exists.
- Do not use the product for a purpose that requires exceptional quality and reliability relating to user's injuries or accidents – aerospace, aviation, health care, nuclear power, transportation, and safety purposes.
- Sollae Systems is not responsible for any accident or damage occurring while using the product.

7.2 Exemption from Liability

7.2.1 English version

In no event shall Sollae Systems Co., Ltd. And its distributors be liable for any damages whatsoever (including, without limitation, damages for loss of profit, operating cost for commercial interruption, loss of information, or any other financial loss) from the use or inability to use the EZI-10 even if Sollae Systems Co., Ltd. Or its distributors have been informed of such damages.

The EZI-10 is not designed and not authorized for use in military applications, in nuclear applications, in airport applications or for use in applications involving explosives, or in medical applications, or for use in security alarm, or for use in a fire alarm, or in applications involving elevators, or in embedded applications in vehicles such as but not limited to cars, planes, trucks, boats, aircraft, helicopters, etc..

In the same way, the EZI-10 is not designed, or intended, or authorized to test, develop, or be built into applications where failure could create a dangerous situation that may result in financial losses, damage to property, personal injury, or the death of people or animals. If you use the EZI-10 voluntarily or involuntarily for such unauthorized applications, you agree to subtract Sollae Systems Co., Ltd. And its distributors from all liability for any claim for compensation.

Sollae Systems Co., Ltd. And its distributors entire liability and your exclusive remedy shall be Sollae Systems Co., Ltd. And its distributors option for the return of the price paid for, or repair, or replacement of the EZI-10.

Sollae Systems Co., Ltd. And its distributors disclaim all other warranties, either expressed or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose, with respect to the EZI-10 including accompanying written material, hardware and firmware.

7.2.2 French version

- Documentation

La documentation du boîtier EZI-10 est conçue avec la plus grande attention. Tous les efforts ont été mis en œuvre pour éviter les anomalies. Toutefois, nous ne pouvons garantir que cette documentation soit à 100% exempt de toute erreur. Les informations présentes dans cette documentation sont données à titre indicatif. Les caractéristiques techniques peuvent changer à tout moment sans aucun préavis dans le but d'améliorer la qualité et les possibilités des produits.

- Copyright et appellations commerciales

Toutes les marques, les procédés, les références et les appellations commerciales des produits cités dans la documentation appartiennent à leur propriétaire et Fabricant respectif.

- Conditions d'utilisations et limite de responsabilité

En aucun cas Sollae Systems Co., Ltd. ou un de ses distributeurs ne pourra être tenu responsable de dommages quels qu'ils soient (intégrant, mais sans limitation, les dommages pour perte de bénéfice commercial, interruption d'exploitation commerciale, perte d'informations et de données à caractère commercial ou de toute autre perte financière) provenant de l'utilisation ou de l'incapacité à pouvoir utiliser le boîtier CIE-H12, même si Sollae Systems Co., Ltd. ou un de ses distributeurs a été informé de la possibilité de tels dommages.

Le boîtier EZI-10 est exclusivement prévu pour un usage en intérieur, dans un environnement sec, tempéré (+10 °C à +40°C) et non poussiéreux. Le boîtier EZI-10 n'est pas prévu, ni autorisé pour être utilisé en extérieur, ni de façon embarquée dans des engins mobiles de quelque nature que ce soit (voiture, camion, train, avion, etc...), ni en milieu explosif, ni dans des enceintes nucléaires, ni dans des ascenseurs, ni dans des aéroports, ni dans des enceintes hospitaliers, ni pour des applications à caractère médical, ni dans des dispositifs de détection et d'alerte anti-intrusion, ni dans des dispositifs de détection et d'alerte anti-incendie, ni dans des dispositifs d'alarme GTC, ni pour des applications militaires.

De même, le boîtier EZI-10 n'est pas conçu, ni destiné, ni autorisé pour expérimenter, développer ou être intégré au sein d'applications dans lesquelles une défaillance de celui-ci pourrait créer une situation dangereuse pouvant entraîner des pertes financières, des dégâts matériel, des blessures corporelles ou la mort de personnes ou d'animaux. Si vous utilisez le boîtier EZI-10 volontairement ou involontairement pour de telles applications non autorisées, vous vous engagez à soustraire Sollae Systems Co., Ltd. et ses distributeurs de toute responsabilité et de toute demande de dédommagement.

En cas de litige, l'entière responsabilité de Sollae Systems Co., Ltd. et de ses distributeurs vis-à-vis de votre recours durant la période de garantie se limitera exclusivement selon le choix de Sollae Systems Co., Ltd. et de ses distributeurs au remboursement de votre produit ou de sa réparation ou de son échange. Sollae Systems Co., Ltd. et ses distributeurs démentent toutes autres garanties, exprimées ou implicites.

Tous les boîtiers EZI-10 sont testés avant expédition. Toute utilisation en dehors des spécifications et limites indiquées dans cette documentation ainsi que les court-circuit, les chocs, les utilisations non autorisées, pourront affecter la fiabilité, créer des dysfonctionnements et/ou la destruction du boîtier EZI-10 sans que la responsabilité de Sollae Systems Co., Ltd. et de ses distributeurs ne puissent être mise en cause, ni que le boîtier EZI-10 puisse être échangé au titre de la garantie.

- Rappel sur l'évacuation des équipements électroniques usagés

Le symbole de la poubelle barré présent sur le boîtier EZI-10 indique que vous ne pouvez pas vous débarrasser de ce dernier de la même façon que vos déchets courants. Au contraire, vous êtes responsable de l'évacuation du boîtier EZI-10 lorsqu'il arrive en fin de vie (ou qu'il est hors d'usage) et à cet effet, vous êtes tenu de le remettre à un point de collecte agréé pour le recyclage des équipements électriques et électroniques usagés. Le tri, l'évacuation et le recyclage séparés de vos équipements usagés permettent de préserver les ressources naturelles et de s'assurer que ces équipements sont recyclés dans le respect de la santé humaine et de l'environnement. Pour plus d'informations sur les lieux de collecte des équipements électroniques usagés, contacter votre mairie ou votre service local de traitement des déchets.

8 History

Data	Version	Comments	Author
2009.08.31	1.0	Initial Release	
2011.06.30	1.1	○ added "Control Method of Slave's output ports' menu ○ changed style of the document ○ corrected the hyperlink of support web page ○ updated figures	Roy LEE
2011.01.30	1.2	○ deleted MACRO and 100Mbit	Amy KIM
2012.06.25	1.3	○ Change description of network interface ○ Remove description about PPPoE and DHCP ○ Extend the warranty period to two years	Amy KIM
2013.02.07	1.4	○ Change voltage conditions of output port	Amy KIM
2013.05.16	1.5	○ Add related material ○ Add Exemption From Liability ○ Add Features	Amy KIM
2013.12.26	1.6	○ Correct some errors and expressions	Amy KIM