veawe™	Remote IO Module / Modbus transmitter UIO-4DI4DO

Features

- 4 Digital Inputs and 4 Digital Outputs
- Modbus RS-485 Protocol Interface.
- Convenient address selection rotatory switch from 1 – 99 Address
- Complete range of baud rate settings supported
- Suitable for both Din Rail and Wall Mountable
- Product Dimensions 110mm x 50mm x 55mm (L x W x H)

Supported Modbus Function Codes

01 – Read Coil Outputs
02 – Read Discrete Inputs
03 – Read Holding Registers
04 – Read Input Registers
05 – Write Single Coil
06 – Write Single Register
15 – Write Multiple Coils
16 – Write Multiple Registers

Discrete Inputs (Read Only)

(10001) to (10004)

- Input 1~4 Status. 1 indicates Input is High and 0 indicates Low

Coils (Read / Write)

(20001) to (20004)

- Digital Output 1~4 Status and Control.
  Setting this bit to 1 will Switch ON Digital Output and 0 will switch OFF

(20009) to (20010)

- Digital Input 1 ~ 2 Count Reset respectively
  Setting this bit to 1 will Reset the count value stored. This coil auto reset to 0 once the operation is complete

(20011) to (20012)

- Digital Input 3 ~ 4 does not support counters

Input Registers (Read Only)

(30001) ~ (30004)

- Undefined

(30005) ~ (30006)

- RPS value in 16bit signed for Digital Input 1 ~ 2 respectively

(30007) ~ (30008)

- RPM value in 16bit signed for Digital Input 1 ~ 2 respectively

(30009) ~ (30012)

- 32 bit unsigned Retentive memory Digital Input 1 & 2 Count values

(30013) ~ (30016)

- Digital Input 3 ~ 4 does not support counters

Holding Registers (Read/Write)

(40001) ~ (40015)

- Undefined

(40016) ~ (40017)

Digital Input 1 ~ 2 Mode Register respectively

- 0 – Digital Input 1~2 Discrete
- 1 – Digital Input 1~2 RPM Measurement
- 2 – Digital Input 1~2 Production Counter

(40018) ~ (40019)

PPR – Pulse per revolution for RPM 1 ~ 2

- 1 ~ 2000 – No.of pulses per revolution of the connected input

Configuration Setting

(40101)

- Device Address as per the address switch – (Read Only)

(400102)

(Reg.Value) – Baud Rate

0 – 300	8 – 14400
1 – 600	9 – 19200
2 – 1200	10 – 38400
3 – 1800	11 – 57600
4 – 2400	12 – 62500
5 – 4800	13 – 115200
6 – 7200	
7 – 9600	**Default. 9 – 19200**

(40103)

(Reg.Value) – Bits, Parity, Stop Bit

0 – 8 N 1
1 – 8 E 1
2 – 8 O 1
3 – 8 N 2
4 – 8 E 2
5 – 8 O 2

Default. 0 – 8 N 1

Default Mode Switch

Default mode is handy when the serial communication setting are forgotten. Setting the Address switch to 00 will put the device in default mode

Address Set to 00 - Default mode ON

- Slave Address – 1, Baud 19200, 8N1

Address Set to non 00 - Default mode OFF

- As per the saved configuration values.

Note:

No parameter selection is changed just by entering the default mode. All the parameters remains same including the communication settings unless changed by the master or if there is a corruption in data error indicated in normal mode the device will try to recover to Factory settings.

This mode can be used to read the present settings and/or change the settings

Diagnostics

Tx LED - Quick Blink Indicates Tx Data in Normal operation
Rx LED - Quick Blink Indicates Rx Data in Normal operation
Power LED - Power Supply Status

Electrical Details

Power Supply: 12V to 24 V DC
Connector Type: 5.08mm Fixed Screw terminal block

Top Connector

RS485

A+	B-	E
1	2	3

Bottom Connector

Power

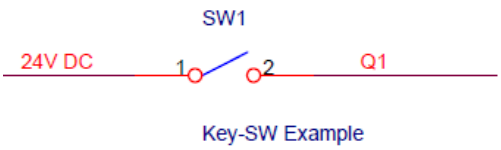
V+	V-
1	2

Sensor Connector

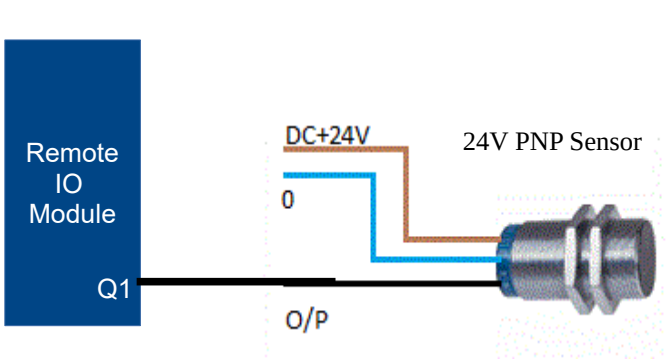
X1	X2	X3	X4	Y1	Y2	Y3	Y4
1	2	3	4	5	6	7	8

Connection Example

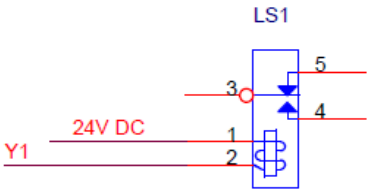
Input Connection



Key-SW Example



Output Connection



RELAY Example