Delta AH series PLC (Standard Modbus)

HMI Factory Setting:

Baud Rate: 9600. 7. Even. 1. RS232

Controller Station Number: 1

Control Area / Status Area: D0/D10

Connection

a. RS-232 (DOP-A/AE/AS, DOP-B Series)

```
        DOP series                  Controller
 9 pin D-sub male (RS-232)   9 pin Mini DIN male (RS-232)

     RXD (2)  ─────────────────────  (3) TXD

     TXD (3)  ─────────────────────  (2) RXD

     GND (5)  ─────────────────────  (5) GND
```

Definition of PLC Read/Write Address

a. Registers

Type	Format Word No. (n)	Read/Write Range	Data Length	Note
Input Relay	**X**n	**X**0 – **X**511	Word	
Output Relay	**Y**n	**Y**0 – **Y**511	Word	
Auxiliary Relay	**M**n	**M**0 – **M**8191	Word	6
Stepping Relay	**S**n	**S**0 – **S**2047	Word	6
Special Auxiliary Relay	**SM**n	**SM**0 – **SM**2047	Word	6
Special data Register	**SR**n	**SR**0 – **SR**2047	Word	
Data Register	**D**n	**D**0 – **D**65535	Word	
Timer	**T**n	**T**0 – **T**2047	Word	
Counter	**C**n	**C**0 – **C**2047	Word	
32-bit Counter	**HC**n	**HC**0 – **HC**63	Double Word	
Index Register	**E**n	**E**0 – **E**31	Word	
Link Register	**L**n	**L**0 – **L**65535	Word	

b. Contacts

Type	Format Bit No. (b)	Read/Write Range	Note
Input Relay	**X**n.b	**X**0.0 – **X**511.15	
Output Relay	**Y**n.b	**Y**0.0 – **Y**511.15	
Stepping Relay	**S**b	**S**0 – **S**2047	
Auxiliary Relay	**M**b	**M**0 – **M**8191	
Special Auxiliary Relay	**SM**b	**SM**0 – **SM**2047	
Timer	**T**b	**T**0 – **T**2047	
Counter	**C**b	**C**0 – **C**2047	
32-bit Counter	**HC**b	**HC**0 – **HC**63	
Data Register	**D**n.b	**D**0.0 – **D**65535.15	4
Link Register	**L**n.b	**L**0.0 – **L**65535.15	

NOTE

1)   PLC will reset to Modbus Ascii protocol when the power of PLC is cut off.

2)   Please use "Screen Editor" → "Special Parameters" → "Extra" to set HMI. It supports both Ascii/RTU mode, but default is Ascii mode.
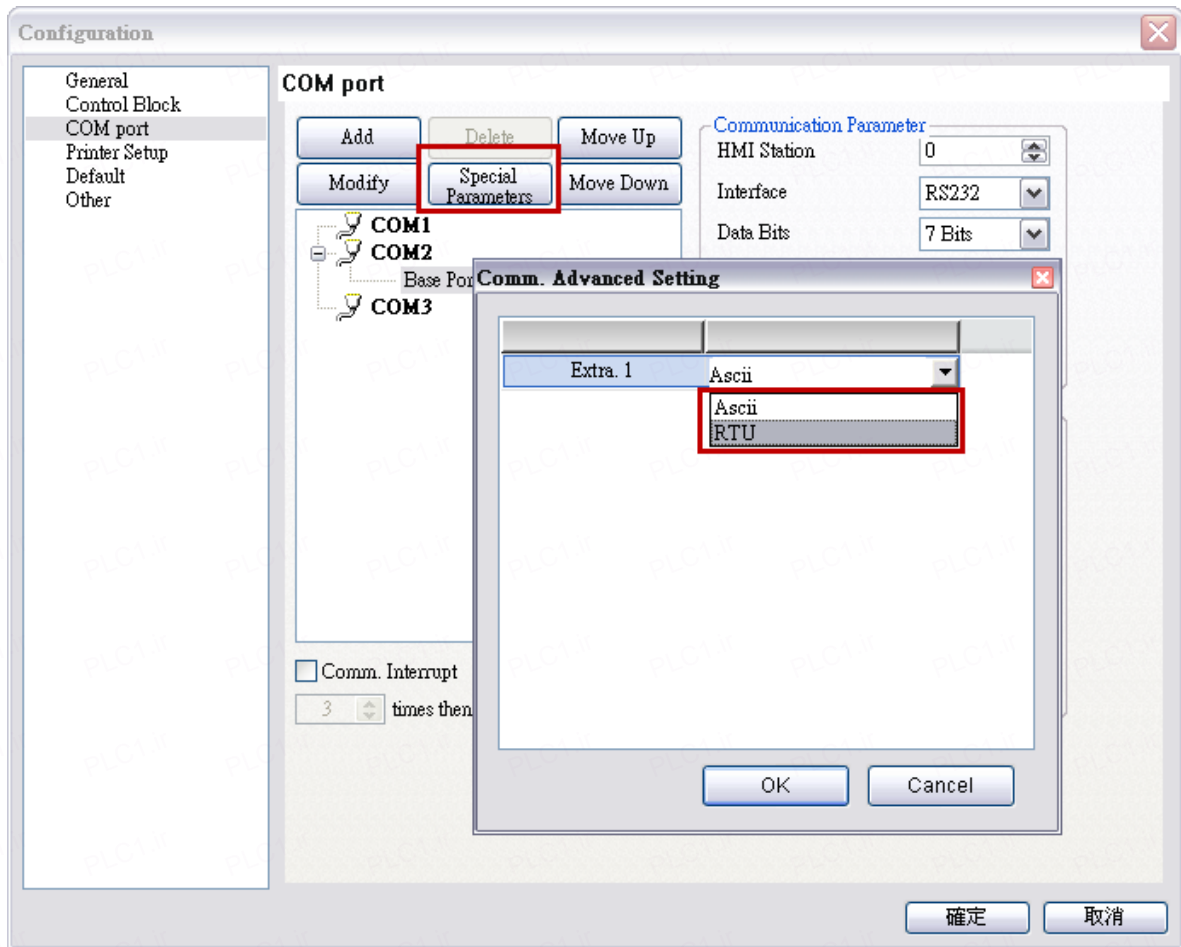
3) Set PLC by switch setting Modbus Ascii and Modbus at "Delta ISPSoft \ Project" >> "PLC Parameter".

4) Contacts Dn.b can not work for broadcast function.

5) Relationship between Modbus address HMI register:

Delta AH series PLC (Standard Modbus) Address		Modbus Address (Dec)	Modbus Address (Hex)
Holding Registers	D0.0 – D32767.15	W400001 – W4 32768	W400001 – W4 32768

6) The device address must be the multiple of 16.