Modicon TSX NEZA (Uni-Telway)

HMI Factory Setting:

Baud rate: 9600, 8, Odd, 1

Controller Station Number: 2

Control Area / Status Area: %MW0 / %MW10

Connection

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

It requires specific TSX PCX1031 cable of Modicon Uni-Telway for wiring.

DOP Series	Controller
9 pin D-SUB (RS-232)	9 pin D-SUB male (RS-232)
RXD (2)	(2) SD
TXD (3)	(3) RD
GND (5)	(5)SG

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



c. RS-485 (DOP-A/AE Series)



d. RS-485 (DOP-AS57 Series)



e. RS-485 (DOP-AS35/AS38 Series)



f. RS-485 (DOP-B Series)



Definition of PLC Read/Write Address

a. Registers

Type Format Word No. (n)	Format	Pood /W/rite Ponge	Data Longth	Noto
	Reau/ write Range	Data Length	NULE	
WORD_DEVICE_ Internal	% MW n	% MW 0 – % MW 65534	Word	<u>6</u>
WORD_DEVICE_ System	% SW n	% SW 0 - % SW 127	Word	
WORD_DEVICE_ Input	%KWn	% KW 0 – % KW 65534	Word	Read only

b. Contacts

Туре	Format Word No. (n) Bit No. (b)	Read/Write Range	Note
BIT_DEVICE_ Internal	% M n:b	% M 0:0 – % M 65534:15	<u>4, 6</u>
BIT_DEVICE_ System	% S b	% S 0 - % S 127	
BIT_DEVICE_ Internal1	% M b	% M 0 – % M 65534	<u>5</u>

- 1) HMI Station needs to be in range of 1 8.
- 2) PLC station number can be the same as HMI station number.
- 3) Internal memory of PLC and other relative parameters must be set up first or only %S will function, others will not be able to communicate.
- 4) %Mn:b is the Bit address that corresponds to WORD_DEVICE_ Internal (%MWn).
- 5) %Mb is the internal Relay address of PLC.
- 6) The read/write range of WORD_DEVICE_ Internal / BIT_DEVICE_ Internal depends on the used memory space of PLC.
- 7) The differences between **Modbus Slave** and **Uni-Telway Slave** mode:

When PLC is in Modbus Slave mode	When PLC is in Uni-Telway Slave mode
The following drivers are all available for use. 1. Modicon / TWIDO 2. Modbus / 984 RTU (Master) 3. Modbus / 984 RTU (Master, 6 Digits) 4. Modbus / RTU Hex Address (Master)	 To increase communication efficiency: 1. Select <u>TSX NEZA (Uni-Telway)</u> when reading and writing only one word of %MW data for one time communication. 2. Select <u>TSX (Uni-Telway)</u> when reading and writing up to 30 words of %MW data for one time communication and there are more than two PLCs and HMIs connected. 3. Select <u>TSX (1-1 Uni-Telway)</u> when reading and writing up to 30 words of %MW data for one time communication and there are more than two PLCs and HMIs connected.