Technical Announcement

DELTA ELECTRONICS, INC. Electromechanical B.U.

Product	HMI	Models	All DOP A&B Series	Security Classification	☑General ☐Confidential ☐Top-secret
				ECN No.	NA
Publish Division	Application Engineering	Publisher	Martin Lin	Issue No.	FAE-01-H08903-000
				Released Date	9/3/2008
Receiving Div.	TW Sales & PM, DCE, DEU, DPR, DES, DEJ,DEK,DEJ				

Purpose:

DOP HMI bypass mode function operation guidance.

Explanation:

1.   How to use bypass mode via COM port to communicate with PLC.
2.   How to use bypass mode via USB port to communicate with PLC.

Note:

1.   HMI does not operate in bypass mode.
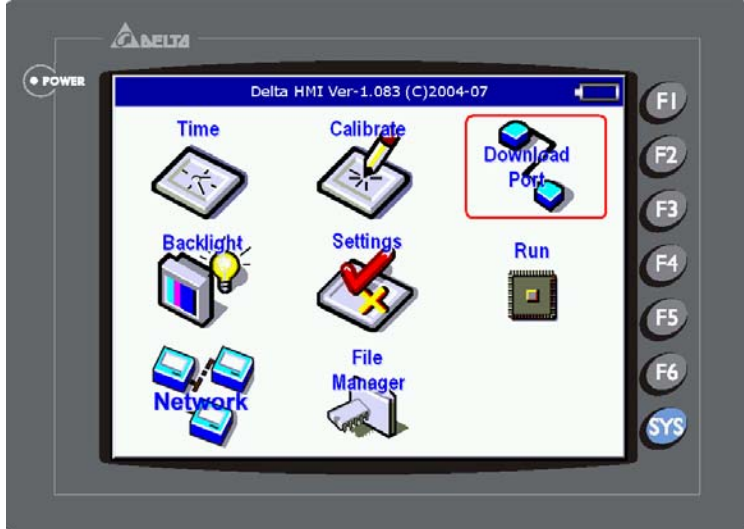2.   The bypass mode only provides controller with Delta PLC.
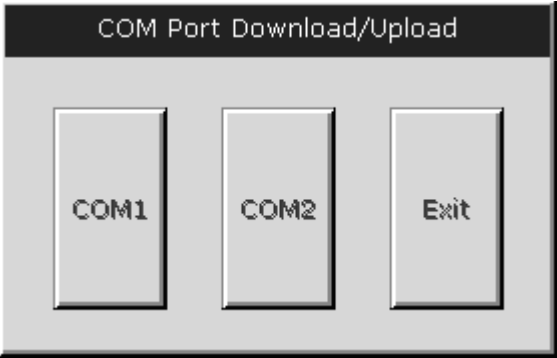
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HMI provides bypass mode function. The bypass mode function means PC can monitor PLC directly via HMI communication port. The user can monitor or up/download PLC program in bypass mode.

COM or USB

RS-232/422/485
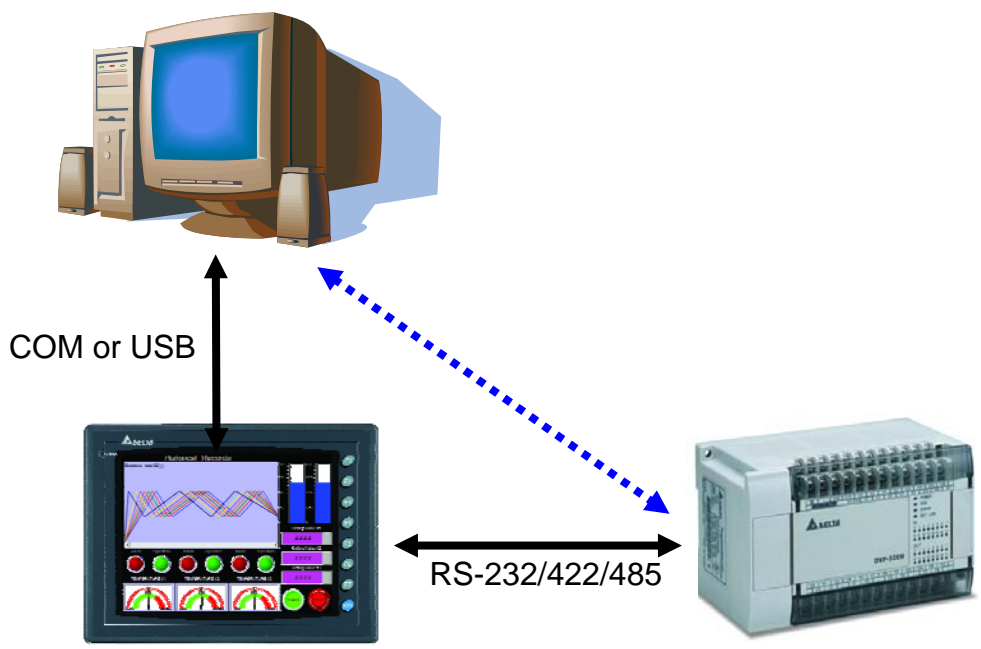
1. Bypass mode via COM port

	Settle the cable between HMI and PLC.
	Make sure the protocols in HMI and PLC are the same.
SYS	Enter the system page and select bypass mode. Press SYS key more than 3 seconds. You will see the Download Port text and press it.

Download Port	Select the communications interface. **COM Port Download/Upload** COM1　　COM2　　Exit
COM1/COM 2	Select bypass mode function. **Com Port**　✕ ⚠ Bypass Mode ? YES　　NO
YES	Bypass mode is being executed. **COM1**　✕ ⓘ Bypassing... Cancel

	Opening the WPL program and choose the correct communication interface. This example adopts RS-232 interface.
WPLSoft	**&Communication Set** Connection Setup Type RS232 ▼ Communication Setting COM Port COM8 ▼ ⦿ ASCII Data Length 7 ▼ ○ RTU Parity Even ▼ Stop Bits 1 ▼ Auto-Detect Baud Rate 9600 ▼ Station Address 1 Default Assign IP Address ☐ . . . IP List Baudrate Setting Decided by ⦿ PLC ○ WPL
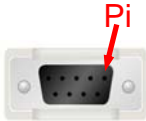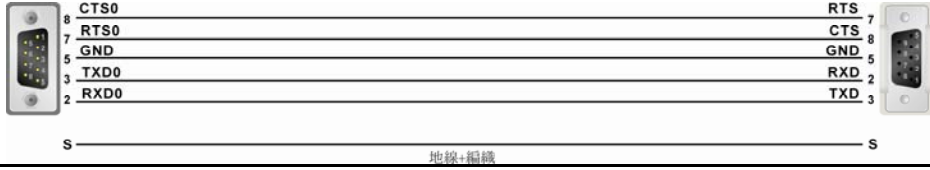
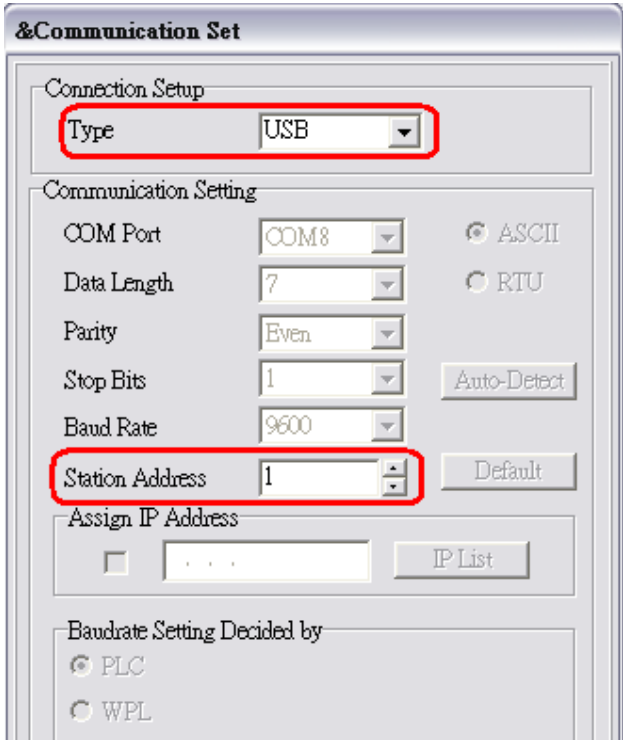| CABLE | Settle the cable between HMI (COM1) and PC via RS-232.
If the communication between HMI and PLC adopts RS-232 at COM2, HMI will connect to PC by RS-232 through COM1.

| DOP
9 pin D-SUB male
(RS-232) | PC
9 pin D-SUB female
(RS-232) | Controller |
| --- | --- | --- |
| RXD (2) ———— (3) TXD
TXD (3) ———— (2) RXD
GND (5) ———— (5) GND
RTS (7) ———— (8) CTS
CTS (8) ———— (7) RTS | | Pi |

D-SUB 9pin to DOP series (male) D-SUB 9pin to PC (female)

| | CTS0 | RTS 7 |
| 8 | RTS0 | CTS 8 |
| 7 | GND | GND 5 |
| 5 | TXD0 | RXD 2 |
| 3 | RXD0 | TXD 3 |
| 2 | | |
| S | | S |
地線+編織 |
| --- | --- |
| | Use WPL software to monitor PLC in bypass mode. |
| | To finish the bypass mode with COM port. |

2. Bypass mode via USB port

	Settle the cable between HMI and PLC.
	Make sure the protocols in HMI and PLC are the same.
CABLE	Settle the cable between HMI and PC via USB. USB TAPE B to DOP series USB TAPE A to PC

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WPLSoft	Opening the WPL program and choose the correct communication interface. This example adopts USB interface. Please enter the station address if the original communication between HMI and PLC is use RS-485.
	Use WPL software to monitor PLC in bypass mode.
	Bypass mode is being executed.
	To finish the bypass mode with USB port.

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