

# **Connecting the Power and Host PC**

• Make sure your PC has workable network settings.

Disable or well configure your Windows firewall and Anti-Virus firewall first, else the "Search Servers" on Chapter 5 (page 4) may not work. (Please contact with your system Administrator)

**2** Check Init/Run switch is on **"Run"** position.

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• Connect both the tDS/tDSM series and your PC to the same sub network or the same Ethernet Switch.

**④** Supply power (PoE or  $+12 \sim +48 V_{DC}$ ) to the tDS/tDSM series.





RS-232 Wiring: Connect the RxD to the TxD pins (The tDS-712 is used as an example.)







**RS-422 Wiring:** Connect the RxD1- to the TxD1- pins and connect the RxD1+ to the TxD1+ pins (The tDS-715 is used as an example.)

Note: While using RS-485 modules (e.g., tDS-715), you should wire the Data1+ with Data2+ signals, and wire the Data1- with Data2- signals for self-test.



Then open the first two COM Ports, send data to one and receive data from the other.

### **Configuring Network Settings**

• Double click the VxComm Utility shortcut on the desktop.

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- **2** Click the **"Search Servers"** button to search your tDS/tDSM.
- Double click the name of tDS/tDSM to open the "Configure Server (UDP)" dialog box.

xComm	VxComm Utility [v2.13.05, File Server Port Tools	Apr.07, 2016]		1		
	Add Server(s)	Confi	gure Server	Port	Configure Po	rt Baudrate
	Remove Server	Name	Alias	- IP Address	III Sub-net Mask	Gateway
	Configuration (UDP)	tDS-718i_RevB tPET-PDZRT <u>RevB</u> SI-002	Tiny Ethen10 N/A	192.168.255.1 18.6.8.25 10.0.8.213	255.255.0 255.255.255.0 255.255.255.0	192.168.0.1 10.0.8.254 10.0.8.254
	Status	•	III			4

Factory Default Settings for the tDS/tDSM:

IP	192.168.255.1
Gateway	192.168.0.1
Mask	255.255.0.0
Mask	255.255.0.0

• Contact your Network Administrator to obtain a correct network configuration (such as **IP/Mask/Gateway**). Enter the network settings and then click "**OK**". The tDS/tDSM will use the new setting 2 seconds later.

Configure Server (U	DP)						×
Server Name :	tDS-718i_Re∨B	4					
DHCP:	0: OFF 🔹	Sub-net Mask :	255.255.255.0		Alias:	Tiny	(7 Chars)
IP Address :	10.0.8.246	Gateway :	10.0.8.254		MAC:	00:0d:e0:8e:f7	:18
Warning!! Contact your Network Administrator to get correct configuration before any change.							

## **Configuring Virtual COM Ports**

• Wait 2 seconds and then click the "Search Servers" button again to ensure the tDS/tDSM is working well with new configuration.

Click the name of the tDS/tDSM to select it.

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🥪 VxComm Utility [v2.13.05, Apr.07, 2016]						
File Server Port Tools						
	Confi	gure Server			Configure Po	ort
Where remote serve the utility Where remote serve the test	VxComm Servers			Port	Virtual COM	Baudrate
Add Server(s)						
<b>O</b> Web	(	2		•		•
Search Servers	Name	Alias	iP Au	ureee	Sub-net Mask	Gateway
Configuration (UDP)	tDS-718i_RevB tPET-PD2R1_RevB	Tiny EtherlΩ	10.0.1 10.0.1	8.246 8.23	255.25 _55.0 255.255.255.0	10.0.8.254 10.0.8.254
Exit	SI-002	N/A	10.0.5	8.213	255.255.255.0	10.0.8.254
						ħ
Status						

#### • Click the "Add Server[S]" button.

**4** Assign a COM Port number and click **"OK"** to save your settings.

VxComm Utility [v2.13.05, File Server Port Tools	Apr.07, 2016]
VxComm Utility (v2.13.05, File Server Port Tools File Server Port Tools Configuration (UDP) Exit	Apr.07, 2016] Configure Server Configure Port Adding Servers  IP Range Server Options Port Options Server Information Server Name : tDS-718i_RevB IF Get name automatically IP Range Start : 10.0.8.246 IP Range End : 10.0.8.246 Includes the following special IP : 0 (Net) IF 254 (Gateway) 255 (Broadcast) Virtual COM and I/O Port Mappings COM Port : 4 COM2
Status	□       Fixed baudra trongs of servers.         □       Maps virtual         □       COM4         □       COM5         □       COM6         □       OK         □       CoM10         □       COM11

S Click on tDS/tDSM name and check the virtual COM Port mappings on the PC.

VxComm Utility [v2.13.05,	Apr.07, 2016]				
File Server Port Tools	-		1		1
	👘 Config	gure Server		Configure Pa	ort
driver & utility		(10.0.0.040)	Port	Virtual COM	Baudrate
Where remote serial devices become part of your PC	102-7181_RevB	[10.0.8.246]	Port I/O Port 1	Reserved COM2	N/A Dynamic
Add Server(s)					
X Remove Server					
O Web				III	•
Search Servers	Name	Alias	IP Address	Sub-net Mask	Gateway
	tDS-718i_Re∨B	Tiny	10.0.8.246	255.255.255.0	10.0.8.254
Configuration (UDP)	tPET-PD2R1_RevB	EtherIO	10.0.8.23	255.255.255.0	10.0.8.254
Exit	SI-002	N/A	10.0.8.213	255.255.255.0	10.0.8.254
					+
Status: OK					

• Click the **"Restart Driver"** item in the **"Tools"** menu to display the "VxComm Utility: Restarting Driver" dialog box, and then click the **"Restart Driver"** button.

😅 VxComm Utility [v2.13.05, Apr.07, 2016]					
File Server Port Too	ols				
	Restart Driver	Server		Configure Port	1
	Terminal		Port	Virtual COM	Baudrate
VxContraction Where remote series become part of your P	Modbus RTU Mast	ter 0.8.2.16)	Port I/O Port 1	Reserved COM2	N/A Dynamic
🖉 Add Servi	Modbus TCP Masr	VxComm Utility : Restarting I	Driver	(Part)	×
🗙 Remove S	Driver Options	STOP Restart the dri	ver to use n	ew configuration.	
Veb 💆	System Informatio	Make sure you	i have close	d all virtual COM	ports first.
Search Servers	s Name tDS-718i_RevE	Status: Driver is not ru	nning.		
Configuration (VDP)	SI-002	Restart Driv	er	Cancel	
EAR					
	•				'

# **7** Self-Test

• Right click Port1 and then choose the "Open COM Port" item.

• Check that the configuration of the COM Port is correct and then click the **"Open COM"** button.

VxComm Utility [v2.13.05, Apr.07, 2016]						
File Server Port Tools						
	Configure Server		Configure Port			
driver & utility	VxComm Servers	Port	Virtual COM	Baudrate		
Where remote screet of workers	L tDS-718i_RevB (10.0.8.246)	Port I/O	Reserved	N/A Dynamic		
Configuration Setting		<b>2</b>	Open COM Port	anne		
COM Port TCP/IP Port	2	T 7	Open TCP Port			
COM Port : COM2 -	Data Bits : 8	· 👘	Configure Port	•		
Baudrate : 115200 -	Parity Bit : None 🗸	Address Su 0.8.246 25	b-net Mask 6 5.255.255.0 1	Gateway 0.0.8.254		
Open COM	Stop Bits : 1	0.8.23 25 0.8.213 25	5.255.255.0 1 5.255.255.0 1	0.0.8.254 0.0.8.254		
	<			Þ		
Status: OK				11		

- Type a string in the **"Send"** field.
- Click the "Hex/Text" option in the "Display" section.
- Click the "Send" button to send the message.
- **6** If a response is received, it will be displayed in the received field.

COM2,115200 - Terminal V2.13.05 [Apr.07, 2016]	5 - • •
Send \$01M	CR (0x0D)
(Hex) 24 30 31 4D	Interval (ms) 0 🦘
Received: 5	Max. display lines 2000
24 30 31 4D 0D 6	\$01M. Clear Recevied
Success Test	Display ○ Hex/Text ○ Hex ○ Text ● None ■ Exit
L	



Note that if you intend to use Internet Explorer to open the tDS-700 series web server, ensure that the cache function is disabled in order to prevent browser access errors, please disable your Internet Explorer cache as follow:

Step 1: Click "Tools" >> "Internet Options..." in the menu items.

Step 2: Click the "General" tab and then click the "Settings..." button in Temporary Internet files frame.

Step 3: Click the "Every visit to the page" and then click the "OK" button in Settings box and Internet Options box.

For more detail, please refer to <u>"FAQ</u>: How to avoid a browser access error that causes a blank page to be displayed when using Internet Explorer"

#### **Related Information**

tDS/tDSM product page: http://www.icpdas.com/root/product/solutions/industrial\_communication/pds/tds-700.html

Documentation/Firmware:
 CD: \Napdos\tDS-700\Document
 http://ftp.icpdas.com/pub/cd/tinymodules/napdos/tds-700/document/

Firmware:

CD: \Napdos\tDS-700\Firmware

http://ftp.icpdas.com/pub/cd/tinymodules/napdos/tds-700/firmware/

NS-205 and NS-205PSE product page (optional): <u>http://www.icpdas.com/root/product/solutions/industrial\_ethernet\_switch/ns-205.html</u> <u>http://www.icpdas.com/root/product/solutions/industrial\_ethernet\_switch/ns-205pse.html</u>