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# DTC-2D-E02 Ethernet Interface User's Manual





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## Disclaimer

The information and specifications described in this manual are subject to change without notice.

## **Technical Support**

For technical support, visit: <u>www.DTC-2D.com</u> or call +1 (585) 461-2110 during regular business hours EST.

## Warranty and Terms of Sale

For Standard Warranty information, see: www.DTC-2D.com/warranty.htm

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- THE DTC-2D-S01 SERIAL INTRFACE IS NOT DESIGNED, MANUFACTURED, OR INTENDED FOR USE OR RESALE AS ON-LINE CONTROL EQUIPMENT IN HAZARDOUS ENVIRONMENTS, REQUIRING FAIL-SAFE PERFORMANCE, SUCH AS IN THE OPERATION OF NUCLEAR FACILITIES, AIRCRAFT NAVIGATION OR COMMUNICATION SYSTEMS, AIR TRAFFIC CONTROL, DIRECT LIFE SUPPORT MACHINES, OR WEAPONS SYSTEMS, IN WHICH THE FAILURE OF TECHNOLOGY COULD LEAD DIRECTLY TO DEATH, PERSONAL INJURY, OR SEVERE PHYSICAL OR ENVIRONMENTAL DAMAGE.



## Statement of agency compliance

The DTC-2D-S02 conforms to the following Product Specifications:

FCC Compliance: FCC Part 15, Subpart B The DTC-2D-S02 is RoHS compliant.

This certification applies to the DTC-2D-S02 as a stand-alone OEM industrial product and does not apply to the DTC-2D-S02 as an integrated module. When integrating the DTC-2D-S02 into another product, that product will still need to obtain any applicable certifications for the full or final product.

**IMPORTANT:** The DTC-2D-S02 and Microscan MS-2D scan engine are intended for connection to a UL-listed direct plug-in power unit marked Class II and rated 5 VDC at 5 Watts, or greater if using additional I/O and/or electrical accessories.

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#### About this manual

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The DTC-2D-E02 interface is an Ethernet communications accessory for Microscan's new, state-ofthe-art OEM MS-2D Scan Engine and allows standard EIA RS-232 communications with the OEM engine unit. It is designed as a low-profile daughter card that would normally mount directly on top of the MS-2D scanner.

The DTC-2D-E02 RS-232 Ethernet interface permits the Microscan MS-2D OEM scan engine to be used in designs where the OEM, VAR, or end-user simply wants to use the MS-2D engine design without a costly design-integration into custom discrete circuitry.

The DTC-2D-E02 is a CMOS / TTL RS-232, to Standard Ethernet interface converter for the MS-2D engine. All other I/O and control signals are passed through directly.

This manual provides information on connecting the DTC-2D-E02 Ethernet interface card to the Microscan MS-2D scan engine. For scanner operations, please refer to the Microscan **MS-2D Scan Engine User's Manual**. *P/N 84-000008 Rev A*, or the Microscan website, www.Microscan.com



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# DTC-2D-E02 Ethernet interface card



# **Getting Started**

**Caution:** Be sure that all cables are connected **BEFORE** applying power to the system. Always power down **BEFORE** disconnecting any cables.

Important: The DTC-2D-E02 and Microscan MS-2D scan engine are intended for connection to a UL-listed direct plug-in power unit marked Class II and rated 5 VDC at 5 Watts, or greater if using additional I/O and/or electrical accessories.

#### **Package contents**

Item	Description	Part Number
1	DTC-2D-E02 Ethernet Interface card	DTC-2D-E02



# Attaching the DTC-2D-E02 interface card to the MS-2D scan engine.

To attach the included 2 inch flexible interface cable to the scanner engine board, first slide the end of the ribbon cable with exposed tin leads facing the circuit board (upward), into the housing. Then carefully push the ZIF connector hinged clamp mechanism downward so that it covers the contact points, as seen below.

Do the same thing for the end of the flex cable that attaches to the 2D-S01 interface card. As shown below. Again, the exposed tinned leads must be facing the circuit card (downward).



# Attaching the DTC-2D-E02 interface to your host system.

To attach the DTC-2D-E02 Interface to your host, plug a cat-5 cable from your network into the DTC-2D-E02 and use the Molex I/O connector block interface a seen below.

Sh Chassis Ground

	J2 F	POWER and I/O CONNECTOR		RJ·	-45 ETHERNET INTERFACE
$\bigtriangledown$	1	Not Used		1	TX+
	2	TRIGGER (LOW)	RJ-45	2	TX-
0 0 0 20	3	GOOD READ (LOW)		3	RX+
Board Plug View	4	WAKE UP (LOW)		6	RX-
2D-CBI 03	5	Power Down Signal		4	Not Used, Terminated
2D-0DL03	6	Beep (LOW)		5	Not Used, Terminated
I/O CONNECTOR	7	+5 VDC POWER IN		7	Not Used, Terminated
	8	DC GROUND		8	Not Used, Terminated

If your purchase included an MS-2D scan engine, the scanner communications have been preset to:

115.2 Kb, No Parity, 8 Data bits, 1 Stop bit.



# Host Communications

The DTC-2D-E02 is a CMOS / TTL, to Standard Ethernet interface converter for the MS-2D engine. All other I/O and control signals are passed through directly.

The DTC-2D-E02 Ethernet interface is preset at the factory with the following settings:

RS-232 port to MS-2D : Enabled 115.2 Kb<sup>(2)</sup> 8 Data bits No parity 1 stop bit No flow control Ethernet Port : Static IP : 192.168.56.90<sup>(1)</sup> Subnet : 255.255.0 Gateway : -Port : 2001

<sup>(1)</sup> The DTC-2D-E02's IP address is statically set for those cases where a DHCP server is not available during configuration. If you are using a Null Cat-5 connection, or you need to change the IP address of the module, it will be necessary to first temporarily change your local adapter settings to be compatible with the DTC-2D-E02's subnet. After which you can restore your local adapter's settings.

Alternately, it is recommended that you use the Assign IP Address wizard as described in the Section, <u>Assign IP Address wizard</u>, or <u>Web Configuration Ethernet Settings</u> if the 2DE01 is not on your local subnet, or you want to change it.

<sup>(2)</sup> If your MS-2D is not correctly configured for serial operations, or you want to change serial parameters, refer to the Section, <u>Web Configuration Serial Settings</u>.

After initially applying power to the DTC-2D-E02 Ethernet interface, and if the MS-2D is configured correctly to match the RS-232 comm parameters of the DTC-2D-E02, you will immediately be able to communicate with the MS-2D scanner @ 192.168.056.90 on port 2001. If your MS-2D is not correctly configured for serial operations, or you want to change serial parameters, refer to the Section, <u>Web Configuration Serial Settings</u>.

For additional information on the MS-2D, please read the Microscan MS-2D Engine User's Manual, or visit <u>www.Microscan.com</u>



# Lantronix Device Installer Installation.

To configure the Ethernet port on the DTC-2D-E02 interface, you must first install the XportTM device installer application included with this product.

Below is the Windows-7 installation screen sequence for Web\_setup.exe, the Lantronix Device Configuration installer program.

Open File - Security Warning
Do you want to run this file?
Name:rt, Data\Device_Installer_4_3_0_S\Web_setup.exe Publisher: Lantronix_Inc. Type: Application From: D:\_ACTIVE_PROJECTS\TLC\MS_2D Design Data\L
Run Cancel
V Always ask before opening this file
While files from the Internet can be useful, this file type can potentially harm your computer. Only run software from publishers you trust. What's the risk?
English  CK Cancel

The .NET framework 4 is required.

	In order to install DeviceInstaller you must first install these components:
22	Mcrosoft .NET Framework 4.0 (x86 x64) (Download) (Install
Windows 7 (x86)	Install Close

The installer will then download the latest files.

DeviceInstaller - Download Components	DeviceInstaller 4.3.0.5 (x86) English
Downloading	Installing DeviceInstaller 4.3.0.5 (x86) English. Wait, this
Download File DeviceInstaller 4.3.0.5 (x86) English (2.9MB of	operation could take some time
Start Cancel	



# Lantronix Device Installer Installation.

Continued.

After extracting itself, the Lantronix Device Installer Setup program will run.

岁 Lantronix DeviceInstaller 4.3.0.5 (x86)	병 Lantronix DeviceInstaller 4.3.0.5 (x86)
Welcome to the Lantronix DeviceInstaller 4.3.0.5 (x86) Setup Wizard	Select Installation Folder
The installer will guide you through the steps required to install Lantronix DeviceInstaller 4.3.0.5 (x86) on your computer.	The installer will install Lantronix DeviceInstaller 4.3.0.5 (x86) to the following folder. To install in this folder, click "Next". To install to a different folder, enter it below or click "Browse".
	Eolder: C:\Program Files\Lantronix\DeviceInstaller4.3\ Disk Cost
WARNING: This computer program is protected by copyright law and international treaties. Unauthorized duplication or distribution of this program, or any portion of it, may result in severe civil or criminal penalties, and will be prosecuted to the maximum extent possible under the law.	
Cancel < Back Next >	Cancel < Back Next>
波 Lantronix DeviceInstaller 4.3.0.5 (x86)	波 Lantronix DeviceInstaller 4.3.0.5 (x86)
Confirm Installation	Installation Complete
The installer is ready to install Lantronix DeviceInstaller 4.3.0.5 (x86) on your computer.	Lantronix DeviceInstaller 4.3.0.5 (x86) has been successfully installed.
Click "Next" to start the installation.	Click "Close" to exit.
	Please use Windows Update to check for any critical updates to the .NET Framework.
Cancel < Back Next >	Cancel Close
DeviceInstaller X	

This completes the Lantronix Device Installer application.

ОК



In the Windows Start Menu, you will find the Lantronix folder as seen below. Double Left-click on the Device Installer icon to launch the application.



If your machine does not have any detectable serial ports, you will get the following message. Click OK to continue.

Serial Ports	tup Warnings	
	WARNING: No serial ports were found on this PC! At least one serial port is necessary to recover a device server over a serial port	
	Do not prompt me about this. (Can enable this again from Tools->Options)	
	OK	

The main window will appear as seen below.

22 Lantronix DeviceInstaller 43.0.5						
File Edit View Device Tools Help						
🔎 Search   🤤 Exclude 🛭 🗞 Assign IP						
Lantronix Devices - 0 device(s)	Туре	Name	Group	IP Address	Hardware Address	Status
M Ready						.::

Initially, the DeviceInstaller searches for devices. If no devices (yours) are found, as seen above, you will need to assign or change the IP address of the DTC-2D-E02. To do this, left-click on the Assign IP icon as seen above.



#### Assign IP Address wizard.

If you selected Assign IP Address, the following screen will appear. Follow the prompts to assign your desired parameters into the module.

If no Lantronix modules were detected upon the startup search, you will need to first enter the MAC address printed on the module or product label.

🗞 Assign IP Address		X Assign IP Address	×
	Device Identification Effort the hardware address of the device. This is typically printed on the back panel of the device in the form "12-34-56-78-94-8C".		Assignment Hethod Would you like to specify the IP address or should the unit get its settings from a server out on the network? Chatan an IP address automatically Assign a specific IP address TCP/IP Tutorial
	< Back Next > Cancel Help		< Back Next > Cancel Help
Asign IP Address	P Settings  Please fill in the 12 Address, subset, and gateway to assign the device The subset will be filled in automatically as you type, but please verify ing oscillary of the below fields on make it ing oscillary of the below fields on make it ing oscillary of the below fields on make it is but the subset of the below fields on make it is but the subset of the below fields on make it is but the subset of the below fields on make it is but the subset of the below fields on make it but the subset of the below fields on make it is but the subset of the below fields on make it but the subset of the below fields  P address: 25,255,255,0 Default gateway 0,0,0,0  Below the subset of the below fields  Below the subset of the subset of the below fields  Below the subset of the below fields  Below the subset of the subset of the below fields  Below the subset of the		

You may encounter this message, depending on your local conditions. It is OK to proceed.





Continued.

### Assign IP Address wizard. Continued.

To complete the assignment, click the finish button.



After assignment, you will be able to see your device in the tree and main view of the DeviceInstaller program.

2 Lantronix DeviceInstaller 4.3.0.5				
File Edit View Device Tools Help				
🔎 Search 🤤 Exclude 🔕 Assign IP 🙆 Upgr	ade			
	Device Detaile	h Carferentian Talact Carfere	-11	
Local Area Connection (192.168.1.101)		b Configuration   Teinet Configur	ation	]
- C XPort	Reload Details			
E		Property	Value	-
192.168.56.90	17 Port	Name		
	E	DHCP Device Name		
		Group		=
		Comments		-
		Device Family	XPort	
		Туре	XPort-03/04	
		ID	X5	
		Hardware Address	00-20-4A-E8-9D-37	
		Firmware Version	6.7	
		Extended Firmware Version	6.7.0.1	
		Online Status	Online	
		IP Address	192.168.56.90	
		IP Address was Obtained	Statically	
		Subnet Mask	255.255.255.0	
		Gateway	0.0.0.0	-
Ready				



#### Web Configuration wizard.

With your DTC-2D-E02 powered and connected to the network, select your device in the tree view and then left-click on the Web Configuration tab.



There is no password assigned in the module when shipped. Change it at your own risk. Click OK to proceed.





#### Web Configuration wizard. Continued.

This is the home page for your device. From here, you can change all aspects of the Lantronix XPort module.



## Web Configuration Network Settings.

Device Details Web Config	uration Telnet Configuration	1
🗲 🔁 🏵 Address: 🎹	p://192.168.56.90/secure/ltx_conf.htm	• 🔁 🥰 🔇   🐢 🖼
LANTRO	Firmware Version: V6.7.0.1 MAC Address: 00-20-4A-EA	-6F-6D
₽	Network Settings	
Network		
Server Serial Tuppel	Network Mode: Wired Only	
Hostlist	IR Configuration	
Channel 1	C Obtain IR address automatically	
Serial Settings	Outamine augress automatically	
Email	Auto Comguration Methods	
Trigger 1	BOOTP: @ Enable © Disable	
Trigger 2	DHCP: @ Enable @ Disable	
Trigger 3	AutoIP: @ Enable @ Disable	
Configurable Pins	DHCR Heet Name	
Apply Settings		
Apply Defaults	Use the following IP configuration:	
	IP Address: 192.168.56.90	
	Subnet Mask: 255.255.255.0	
	Default Gateway: 0.0.0	
	DNS Server: 0.0.0.0	
	Ethornot Configuration	
	Muto regoliate	
	Speed: @ 100 Mbps @ 10 Mbps	
	Duplex: @ Full @ Half	
	ок 🖌	

The *Network Settings* page will allow you to change the Xport's external IP settings. When done, click the OK button at the bottom and then click the Apply button to finish. Afterwards, re-search to update the DeviceInstaller tree view.



### Web Configuration Serial Settings.

Device Details Web Configuration Telnet Configuration			
🗲 🔁 🛞 Address: 📶	o://192.168.56.90/secure/ltx_conf.htm	- 📀 🖉	
LANTRO		rre Version: V6.7.0.1 \C Address: 00-20-4A-EA-6F-6D	
۵ ۵	Seria	Settings	
Network			
Server	Channel 1		
Hostlist	Disable Serial Port		
Channel 1	Port Settings		
Serial Settings	Protocol: RS232	Flow Control: None	
Connection	Baud Bate: 115200 - Data Bite: 8 -	Parity None Stan Bite: 1	
Trigger 1	Bald Rate. 115200	Parity. INDIRE - Stop Bits. 1	
Trigger 2	Paak Cantrol		
Trigger 3			
Configurable Pins			
Apply Settings	Idle Gap Time: 12 msec 💌		
Apply Defaults	Match 2 Byte Sequence: 🧉 Yes 🖲 No	Send Frame Immediate: 🧉 Yes 🖲 No	
	Match Bytes: 0x00 0x00 (Hex)	Send Trailing Bytes:   None Cone C Two	
	Flush Mode		
	Flush Input Buffer	Flush Output Buffer	
	With Active Connect: C Yes   No	With Active Connect: C Yes  No	
	With Passive Connect: C Yes C No	With Passive Connect: C Yes <ul> <li>No</li> </ul>	
	At Time of Disconnect: O Yes   No	At Time of Disconnect: O Yes I No	
	At this of Disconnect. O Tes O No	At time of Disconnect. O Tes O No	
		ОК	

The Serial Settings page will allow you to change the Xport's serial port settings.

**Caution:** The serial settings of the Xport must match that of the MS-2D engine. If not, you will not be able to communicate with the scanner.

If you need to change the scanner settings, do that first with ESP software, then change the Xport serial settings to match those of the MS-2D engine.

When done, click the OK button at the bottom and then click the Apply button to finish.



Web Configuration Serial Handshake Settings.

Address: http://192.168.56.90/secure/itx_conf.htm     Image: Configurable Pin Settings   Network   Server   Serial Tunnel   Hostist   Connection   Email   Trigger 1   Trigger 2   Trigger 3   Configurable Pins   Apply Settings   Apply Defaults	
Einnware Version: V6.7.0.1         Mac Address: 00-20-4A-EA-6F-6D         Metwork         Server         Serial Tunnel         Hostist         Channel 1         Serial Settings         Connection         Email         Trigger 1         Trigger 2         Trigger 3         Configurable Plns         Apply Settings         Apply Defaults	
Configurable Pin Settings         Network         Server         Serial Tunnel         Hostist         Channel 1         Serial Settings         Connection         Email         Trigger 1         Trigger 3         Configurable Pins         Apply Settings         Apply Defaults	
Network         Server         Serial Tunnel         Hostist         Channel 1         Serial Settings         Connection         Email         Trigger 1         Trigger 3         Configurable Pins         Apply Settings         Apply Defaults	
Server       Server         Serial Tunnel Hostist Channel 1 Serial Settings Connection Email       CP       Function       Active Level         0       HW Flow Control Out       Image: Control Cont	
Serial Settings       0       HW Flow Control Out       Image: Connection       Image: Connection         Email       1       General Purpose I/O       Image: Connection       Image: Connection         Email       2       HW Flow Control In       Image: Connection       Image: Connection         Image: Connection       2       HW Flow Control In       Image: Connection       Image: Connection         Image: Connection       2       HW Flow Control In       Image: Connection       Image: Connection         Configurable Pins       OK       OK       OK	
Channel 1       0        HW Flow Control Out       Image: Connection	
Serial Settings Connection Email Trigger 1 Trigger 2 Trigger 3 Configurable Pins Apply Settings Apply Defaults	gh
Email     2     HW Flow Control In     Image: Con	gh
Trigger 1 Trigger 2 Trigger 3 Configurable Pins Apply Settings Apply Defaults	gh

If your application requires hardware a hand shake with the MS-2D engine, change the MS-2D engine settings first with ESP software then set the *Configurable Pins* CP0, and CP2 to RTS and CTS respectively as seen above.

When done, click the OK button at the bottom and then click the Apply button to finish.



## Web Configuration TCP Port Settings.

Address: http://192.168.56.90/secure/bx_conf.htm     Firmware Vension: V6.7.0.1   MAC Address: 00-20-4A.EA.6F-6D     Metwork     Server   Serial Tunnel   Hostist   Connect Mode   Passive Connection:   Active Connection:   Passive Connection:   Active Connect Mode   Passive Connection:   Active Connect Mode   Passive Connection:   Active Connect None   Password:   Password:   Apply Settings   Apply Defaults     Modem Escape Sequence   Password:   Connect Host   Quert   Connect Port   O   Remute Host   Quert   Password:   Modem Escape Sequence   Password:   Modem Escape Sequence   Password:   Modem Escape Sequence   Password:
Firmware Version:       V6.7.0.1         MAC Address:       00-20-4A-EA-6F-6D         Image: Serial Tunnel Hostiist       Channel 1         Serial Tunnel Hostiist       Connect Protocol         Protocol:       TCP •         Serial Settings Connection       Connect Mode         Passive Connection:       Active Connect None         Password       Yes • No         Apply Settings       Password         Password       Yes • No         Password       Yes • Yes • No         Show IP Address After RING: • Yes • No         Endpoint Configuration:       Local Port         Local Port       • Yes • No         Endpoint Configuration:       Local Port         Local Port       • Yes • No         Endpoint Configuration:       Local Port         Local Port       • Yes • No         Endpoint Configuration:       Connect Remote Host         Local Port       • O         Remote Port       • Connect Response:         Teinet Com Port       • Yes • No         Local Port       • Yes • No         Local Port       • Connect Response:         Teinet Com Port       • Yes • No         Teinet Com Port       • Yes • No         Tei
Image: Serial Series of S
Network         Server       Channel 1         Serial Tunnel       Connect Protocol         Protocol:       TCP         Serial Settings       Connect Mode         Passive Connection:       Active Connection:         Accept       Yes       Active Connection:         Trigger 1       Accept       Yes       Active Connection:         Trigger 3       Orning:       Yes       Active Connect:       None         Password:       Yes       None       Start Character:       Ox/OD       (in Hex)         Apply Settings       Password:       Modern Mode:       None       Some         Apply Defaults       Password:       Yes C No       Show IP Address After RING:       Yes C No         Endpoint Configuration:       Local Port       2001       Connect Remote Host:       0.0.0         Local Port       2001       Connect Response:       None       Connect Connect         Common Options:       Telnet Com Port       Disable       Connect Response:       None       Endpoint LeD:       Blink       ElD:       Blink       ElD:       Blink       ElD:       Blink       ElD:       Blink       ElD:       Blink       Connect Response:       None       Conne       Conn
Server       Channel 1         Serial Tunnel Hostlist       Connect Protocol         Channel 1       Protocol: TCP •         Serial Settings       Connect Mode         Passive Connection:       Active Connection:         Trigger 1       Accept         Trigger 3       Password         Configurable Pins       Password         Apply Settings       Password:         Apply Defaults       Modem Escape Sequence Pass Through: • Yes • No         Show IP Address After RING: • Yes © No         Endpoint Configuration:         Local Port         Local Port         Common Options:         Telnet Com Port         Disable •         Connect Response:         None         Ves • No         Local Port:         Disable •         Connect Response:         Name:         Hostlist         O Yes • No         LED:         Blink •
Serial Tunnel Hostist       Connect Protocol         Protocol:       TCP •         Serial Settings       Connect Mode         Passive Connection:       Active Connection:         Trigger 1       Accept •         Trigger 3       Password         Configurable Pins       Password         Apply Settings       Password         Apply Defaults       Password:         Modem Escape Sequence       Yes         Pass Through:       Yes         Endpoint Configuration:       Local Port:         Local Port:       2001         Common Options:       Telnet Com Port:         Telnet Com Port:       Disable •         Connect Response:       None         Terminal       Name:         Vise       Yes         Ves       No         LED:       Blink •
Hostist       Protocol: TCP •         Serial Settings       Connection         Trigger 1       Accept ves         Trigger 3       Accept ves         Configurable Pins       Accept ves         Apply Settings       Password:         Apply Defaults       Pass Through:         Modem Endpoint Configuration:       Local Port: 2001         Local Port: 2001       Connect Mode         Remote Host: 0       Remote Host: 0.0.0         Common Options:       Telnet Com Port Ort: Disable *         Terminal Name:       Use       Yes © No         LeD: Blink *       Name:
Connection       Connect Mode         Email       Trigger 1         Trigger 2       Trigger 3         Configurable Pins       Accept   ves • No         Apply Settings       Password ○ Yes • No         Apply Defaults       Modem Excape Sequence • Yes ○ No         Modem Endpoint Configuration:       Local Port 2001 • Auto increment for active connect         Remote Port:       0         Common Options:       Teinet Com Port         Terminal       Use • No         LeD:       Blink ▼
Email Trigger 1 Trigger 2 Trigger 3       Passive Connection:       Active Connection:         Accept Incoming:       Accept Incoming:       Ves       Active Connect.       None         Password       Yes       No       Start Character:       0x000 (in Hex)         Apply Settings       Password:       Modem Mode:       None         Apply Defaults       Password:       Yes       No         Modem Escape Sequence Pass Through:       Yes       No       Show IP Address After RING:       Yes       No         Endpoint Configuration: Local Port:       Local Port:       2001       Auto increment for active connect         Remote Port:       0       Remote Host:       0.0.0       Connect Response:       None       Yes         Common Options: Telnet Com Port Cntrt:       Use Hostlist:       O yes<       No       LED:       Blink       ED:
Trigger 1       Accept Incoming:       Yes       Active Connect.       None         Password       Yes       No       Start Character.       0x0D       (in Hex)         Apply Settings       Password:       Modem Mode:       None       Image: I
Trigger 3       Incoming: 1.100       Incoming: 1.100       Incoming: 1.100         Password       Password       Yes       No       Start Character: 0x00       (in Hex)         Apply Settings       Password:       Modem Mode:       None       Incoming: 1.100       Incoming: 1.100         Apply Settings       Password:       Yes       No       Start Character: 0x00       (in Hex)         Apply Defaults       Password:       Incoming: 1.100       Modem Mode:       None       Incoming: 1.100         Apply Defaults       Password:       Yes       Yes       No       Show IP Address After RING:       Yes       No         Endpoint Configuration:       Local Port:       2001       Incoming:       Auto increment for active connect         Remote Port:       0       Remote Host:       0.0.0       Incoming:       Connect Response:       None       Yes         Common Options:       Telnet Com Port       Disable       Connect Response:       None       Yes       Yes       Yes       None       Yes       ED:       Blink       ED:       Blink       Yes
Configurable Pins       Password       Yes       No       Start Character: 0x000 (in Hex)         Apply Settings       Password:       Modern Mode:       None       Image: Configuration:         Apply Defaults       Modern Configuration:       Show IP Address After RING:       Yes       No         Endpoint Configuration:       Local Port:       2001       Image: Connect Remote Host       0.0.0         Common Options:       Telnet Com Port Contri:       Disable       Connect Response:       None       Image: Connect Response:         Terminal Name:       Use       O Yes       Yes       Yes       Yes       Yes       Yes
Apply Settings       Password:       Modem Mode:       None         Apply Defaults       Modem Escape Sequence Pass Through:       Image: Show IP Address After RING:       Image: Show I
Apply Defaults       Modem Escape Sequence Pass Through: • Yes O No       Show IP Address After RING: • Yes O No         Endpoint Configuration: Local Port.       Image: Control of the second
Endpoint Configuration:         Local Port         Local Port         @         Auto increment for active connect         Remote Port         @         Remote Host         @         Common Options:         Telnet Com Port         Chrif:         Disable         Connect Response:         None         Vse         Name:         Use         Hostlist:         O Yes         No         LED:         Blink<
Local Port:       2001       Auto increment for active connect         Remote Port:       0       Remote Host:       0.0.0         Common Options:       Connect Response:       None       Image: Connect Response:       None         Telnet Com Port       Disable       Connect Response:       None       Image: Connect Response:       None         Terminal       Use       O Yes Image: None       LED:       Blink Image: Connect Response:
Remote Port:       0       Remote Host:       0.0.0         Common Options:
Common Options: Telnet Com Port Disable  Connect Response: None Terminal Name: Use Hostlist:  C Yes  No LED: Blink
Telnet Com Port Disable  Connect Response: None Terminal Name: Use Hostlist C Yes No LED: Blink
Terminal Use O Yes ● No LED: Blink ▼
Disconnect Mode
On Mdm_Ctrl_In Drop: C Yes © No Hard Disconnect: © Yes C No
Check EOT(Ctrl-D): C Yes  No Inactivity Timeout: 0 : 0 (mins : secs)
ОК

The Default port used in the ESP programming software is 2001 as seen above. This page allows full control of this aspect if desired.

When done, click the OK button at the bottom and then click the Apply button to finish.



# DTC-2D-E02 Specifications.





DTC-2D-E02 Specifications			
Power In	External +5 VDC, Reverse Polarity Protected		
Current Draw w/Scanner	2.8 watt, 550 mA. Max, 210 mA typical		
Dimensions	0.98 in. (D) x 1.53 in. (W) x 0.63 in.(H) { 25 x 39 x 6.4 mm. }		
Weight	14 grams		
Operating Environment	-4 to 50 °C (0 to 131 °F), 5-95% RH, non-condensing		
Host Interface	TCP/IP Ethernet RJ-45		
User Interface	Molex 8 pos. socket for trigger and I/O		

RJ-45

# J2 POWER and I/O CONNECTOR

$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	
Board Plug View	

2D-CBL03 I/O CONNECTOR

1	Not Used
2	TRIGGER (LOW)
3	GOOD READ (LOW)
4	WAKE UP (LOW)
5	Power Down Signal
6	Beep (LOW)
7	+5 VDC POWER IN
8	DC GROUND

## RJ-45 ETHERNET INTERFACE

1	TX+
2	TX-
3	RX+
6	RX-
4	Not Used, Terminated
5	Not Used, Terminated
7	Not Used, Terminated
8	Not Used, Terminated
Sh	Chassis Ground









# Appendix – 1 Common MS-2D Data Matrix Configuration Symbols. Continued.



For the full command set, refer to the Microscan MS-2D Scan Engine User's Manual. P/N 84-000008 Rev A.