Getting Started

ContrexHost 3

3200-2022

Suite of
Serial Communications
Applications for
Contrex Motion Controls

Contents

Installing ContrexHost 3

System Requirements

- An IBM® Personal Computer or 100 % compatible
- 90 MHz Pentium or higher microprocessor (or equivalent)
- 16 megabytes (MB) of RAM minimum
  64 MB or more RAM recommended
- 12 MB of hard disk space for a typical installation
- A VGA monitor
- A CD-ROM drive
- Microsoft® Windows® operating system
  - Windows 98
  - Windows NT
  - Windows Me
  - Windows 2000
  - Windows XP

Installation Overview

- **Typical Installation**
  This installation selection installs the entire suite of ContrexHost applications and required support files onto the hard disk. The suite includes the Serial Link Debugger, Network Builder, Database Editor, Control Monitor, Parameter File Editor, PLC Programmer, and the Custom Units Editor.
- **CxOnly Installation**
  This installation selection installs only the CX-Series applications and required support files onto the hard disk. This includes the PLC Programmer, Custom Units Editor, Serial Link Debugger, and the Network Builder.
- **Database Installation**
  This installation selection installs only the Contrex motion control database files onto the hard disk. This selection is intended to be used for database upgrades and database restoration.

Installation Overview continued

- **RS-485 "RTS Control" Driver**
  An RTS line control driver is required for ContrexHost to operate properly under Windows NT type operating systems, such as Windows 2000 Professional, and Windows XP Professional. This driver will be installed with ContrexHost. This driver will only be used by ContrexHost and will not affect normal serial port operations.

Installation Procedure

- **ContrexHost Installation**

▸ To run setup for installing ContrexHost
1. Place the ContrexHost CD in the CD-ROM drive
2. The installation program should begin automatically.
   If the installation program does not begin after a few seconds, from the "Start" menu - select **"Run"** to run "Setup.exe" from your CD-ROM drive.
3. Follow the instructions on your screen.

- **RS-485 "RTS Control" Driver Installation**

▸ Windows 98 instructions --
1. Reboot your system leaving the ContrexHost CD in the CD-ROM drive. Windows should recognize the "RS-485 Converter" as "New Hardware" and activate the "Add New Hardware Wizard"
2. Select the "Next" button.
3. Leave the "Search..." selection selected, and select the "Next" button again.
4. Another dialog box will appear. Place a check mark next to "CD-ROM" to search the ContrexHost CD, and select the "Next" button.
5. Windows should inform you that it is "Ready to install..." (CXHDrv.inf) Select the "Next" button.

Windows will build a "Driver Information Database" and install the driver. (CXHDrv.sys)

If Windows does not locate the driver, select the "Browse"

button. Select the CD-ROM drive that contains the ContrexHost CD. Select the file "CXHDrv.sys" and hit "OK" until Windows installs the driver.
6. Select the "Finish" button – You are now ready to run ContrexHost.

- Windows Me Instructions --

1. Reboot your system leaving the ContrexHost CD in the CD-ROM drive. Windows should recognize the "RS-485 Converter" as "New Hardware Found" and activate the "Add New Hardware Wizard"
2. Leave the "Automatic search" selection selected, and select the "Next" button.

If Windows does not find the driver files...

2a. Place a check mark next to the "CD-ROM" selection to search the ContrexHost CD, and select the "Next" button.

2b. Windows should inform you that it is "Ready to install..." (CXHDrv.inf)

2c. Select the "Next" button.

Windows will build a "Driver Information Database" and install the driver. (CXHDrv.sys)

3. Select the "Finish" button – You are now ready to run ContrexHost.

- Windows 2000 Instructions –

1. After installing ContrexHost from the CD, Open the "Control Panel".
2. Open "Add/Remove Hardware" (double-click the icon)
3. Select the "Next" button twice so Windows searches for devices to add.
4. From the "Devices" list select "Add a new device", and select the "Next" button.
5. Select "No, I want to select hardware from a list", and select the "Next" button.
6. Select "RS-485 Converter" from the list of "Hardware types", and select the "Next" button.

If Windows can not locate the driver...

6a. Select the “Have Disk” button, then the “Browse” button.
6b. Select the CD-ROM drive with the ContrexHost CD in it. Find the “CXHDrv” (,inf) file, select it, and select “Open”, then select “OK” until you see the “Models” list displayed.

7. The “Models” list should display “RS-485 Converter”, select it, then select the “Next” button twice to install the driver.
8. Select the “Finish” button – You are now ready to run ContrexHost.

- Windows XP Instructions –

1. After installing ContrexHost from the CD, Open the “Control Panel”.
2. Open “Add Hardware” (double-click the icon)
3. Select the “Next” button twice so Windows searches for devices to add.
4. Choose “Yes, I have already connected the hardware.”, and select the “Next” button.
5. From the “Installed Hardware” list select “Add a new hardware device”, and select the “Next” button.
6. Select “Install the hardware that I manually select from a list (Advanced)”, and select the “Next” button.
7. Select “RS-485 Converter” from the list of “Common Hardware types”, and select the “Next” button.
8. You should see “RS-485 Converter” under “Model”, select the “Next” button.
   If “RS-485 Converter” does not appear...
   8a. Select the “Have Disk” button. You should see an “Install from disk” dialog box appear.
   8b. Select the CD-ROM drive that has the ContrexHost CD in it.
   8c. From the file list, select the “CXHDrv” (.inf) file and select the “Open” button, then select “Next”.
9. Select eh “Next” button to install the driver.
10. Select the “Finish” button – You are now ready to run ContrexHost.

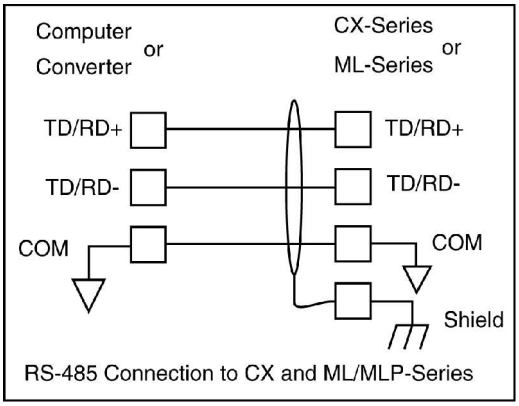
Getting Started

Steps to successful operation

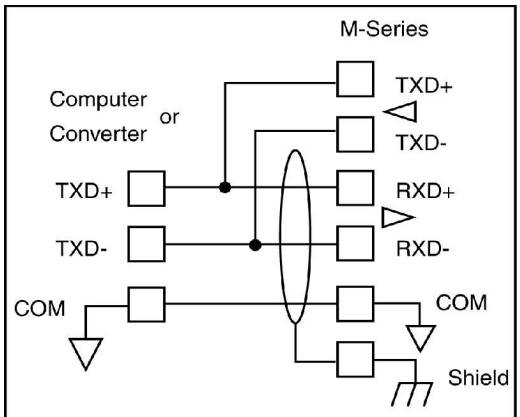
- Serial Communications configuration

RS-232 to RS-485/RS-422 wiring
Use shielded cable and connect signal commons wherever possible.

Connection examples:

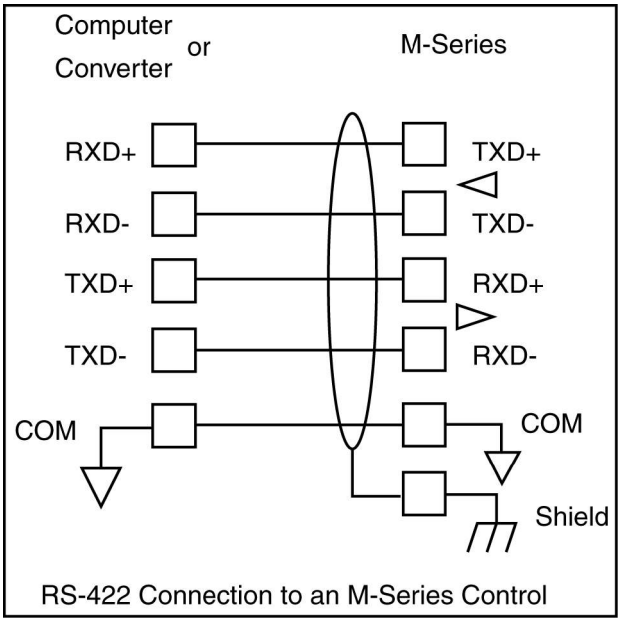


RS-485 Connection to CX and ML/MLP-Series



RS-485 Connection to an M-Series Control

Connection examples continued



RS-422 Connection to an M-Series Control

Refer to the manual for the specific motion control for more detailed wiring information.

Serial Communications setup

Make sure all Contrex motion controls, that are connected to the same serial port, have the same settings for baud rate, parity, data bits, and stop bits.

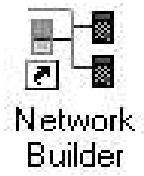
All **CX-Series** controls must have the “CRC Enable” parameter set to “ON”.

All **M/MB/ML/MLP-Series** controls communicate using an *ASCII* protocol. If CX-Series controls are connected to the same port as any of these control types, the “CX” must be set to use the *ASCII* “Record Format”. Do not connect CX-Series controls using *Binary* “Record Format” to the same serial port as other controls that use an *ASCII* protocol.

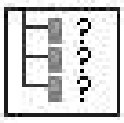
What is a ContrexHost network configuration ?

A ContrexHost network configuration consists of a set of Contrex motion control devices that are connected to computer by one or more serial ports. Each control that is connected to a specific serial port has a unique "Device Address".

A network configuration is required for ContrexHost to be able to communicate with the connected Contrex motion controls.



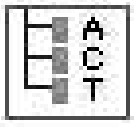
Open the "Network Builder" application to build a network configuration of controls for ContrexHost. The first time you open the "Network Builder" application, you will see the "Network Configuration Builder" wizard. Read and follow the instructions, and the wizard will guide you through the steps required to scan a serial port and automatically build a network configuration for you.



To have the "Network Builder" automatically scan other serial ports, select this button on the Network Builder's toolbar.

You can also manually build a network configuration using the "Network Builder" application. Access help through the "Help" menu in the "Network Builder" for more information on how to manually build, or edit, a network configuration.

After you are finished building a network configuration, you must save and activate the network so the other ContrexHost applications will have access to it.

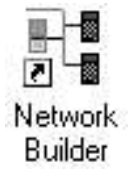


Use this toolbar button to "Activate" the ContrexHost Network Configuration.

Once you have created and activated a network configuration, you can run the other ContrexHost applications.

ContrexHost Applications

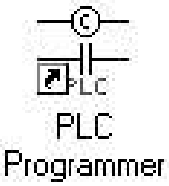
Overview



Network Builder is used to configure ContrexHost with the Contrex control products connected to your RS485/422 serial communications network. The *Auto Configure* feature queries your network to identify product models and software revisions and builds a ContrexHost network configuration for you.

Control Monitor is the primary ContrexHost module used to setup your Contrex control products to meet your application requirements and monitor syatem performance. Select from numerous predefined parameter windows or create your own custom window.

Parameter File Editor allows you to create and save product parameter files. Default and downloaded files can be modified as required to meet your needs. Backup your programmed controls using this application.



PLC Programmer provides an alternative method of programming the embedded PLC in the CX-Series products. Both active and default versions of the PLC program can be retrieved for modification or to be stored on disk.

Custom Units Editor allows you to enter and activate the custom engineering units used to describe the primary display parameter on the *Status* screen of CX-Series units.

Database Editor is provided to assist with the maintenance of the Contrex control product parameter database. Custom software versions of Contrex control products can be made compliant with ContrexHost through simple database modifications.

Serial Link Debugger can assist you with troubleshooting problems with your RS485/422 serial communications link. This software utility allows for the entry and monitoring of character records transmitted on your serial link.

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