Model 4200 Network Controller
Setup Instructions

Hardware Connections

1. Connect the RS-485 Converter to COM 1
2. Connect the access control system device bus to the Converter
3. Connect the bus common ground to a know green wire earth ground
4. Connect the Converter's power supply
5. Connect the 5 VDC power supply to the Network Controller

You may monitor and control the system both by connecting a keyboard and monitor, or by connecting an ethernet cable to a PC running Access Central software.

Direct Keyboard and Monitor

When configured as per above, the Network Controller should be fully functional, and you should be able to view real-time transactions as they occur on the system. The built-in user interface uses the Toye Corporation PC Central operating system, and a copy of the instruction manual can be viewed or downloaded at: http://www.toyecorp.com/soft.zip. When the 4200 is connected to a LAN or WAN, this operating system is not used, and all programming should be done through the Access Central software package located on a Work Station.

Access Central / Ethernet Connection

One or more 4200 Network Controllers may be connected to a Network using either NetBEUI or TCP/IP. Both NetBEUI and TCP/IP drivers are pre-loaded into the 4200 Network Controller. The 4200 should be ordered specifically configured for one or the other, however a built-in setup program allows you to run a setup program to change the default protocol. You will need to connect a Keyboard and Monitor to the 4200 to run the setup program.

1. For single "PC" connectivity, an ethernet UTP Crossover cable is required between the 4200 Network Controller and the "PC's" Network card. For connection to an in-place network, connect the 4200 to the network just as you would any other "PC".

2. To Configure NetBEUI
   Open Control Panel and select the Network icon.
   Add Client for Microsoft Networks (if necessary)
   Add NetBEUI for the particular ethernet card you are using
   Change Primary Network Logon to: Client For Microsoft Networks
   You should now have directory access (Windows Explorer) to the Network Controller

3. TCP/IP With An Existing IP Server
   If you already have an IP network server, and the default protocol in the 4200 is configured for TCP/IP, the 4200 Network Controller will be identified just like any other "PC" on the network.

4. TCP/IP Without An Existing IP Server
   Startup ICS (Internet Connection Sharing) software on your Win98se or Win2000pro computer (this is included with both operating systems). This will run a very simple DHCP service for anything connected to the computer's network card. This requires that you have a dialup, DSL, or cable modem connection as well as a separate network card connection on the same computer running the ICS software. The ICS software will enable all connections to the second network connection to share the first connection to the internet. In doing this it runs a small DHCP service and allocates IP addresses to any computer requesting one.

   Note, that if you want to check to see what IP address the 4200 Network Controller has been assigned and which DHCP server computer issued the IP, then just run the following command on the 4200 Network Controller: ipconfig c:\net <enter key>

5. The Access Central software needs to be configured so that its path statements point to the Network Controller and not to the local "PC". A version of Access Central.mdb is normally shipped with most jobs already configured this way. If your Access Central.mdb does not start up correctly, the path statements are not correct and need to be re-configured. A document on our web site explains how to do it: http://www.toyecorp.com/4200Paths.html
   If you have more than one 4200 Network Controller, you will need AccessAnywhere software, and its path statements must be configured to reflect each of the controllers. There are separate instructions for this procedure.