## DeviceMaster is not detected in the Driver in the MAC communication mode.

This discussion references DeviceMaster's running the following drivers and firmware. Windows Driver version 10.10 (which includes the Comtrol Driver Management Console) <a href="mailto:ftp://ftp.comtrol.com/dev\_mstr/rts/drivers/win7/devicemaster\_windows\_10.10.exe">ftp://ftp.comtrol.com/dev\_mstr/rts/drivers/win7/devicemaster\_windows\_10.10.exe</a> SocketServer version 9.16

ftp://ftp.comtrol.com/dev\_mstr/rts/software/socketserver/socketserver-9.16.bin

Bootloader 3.23

ftp://ftp.comtrol.com/dev\_mstr/rts/software/bootloader/bootloader-3.23.bin

PortVision DX version

ftp://ftp.comtrol.com/dev\_mstr/portvision\_dx/portvision\_dx\_1.03.msi

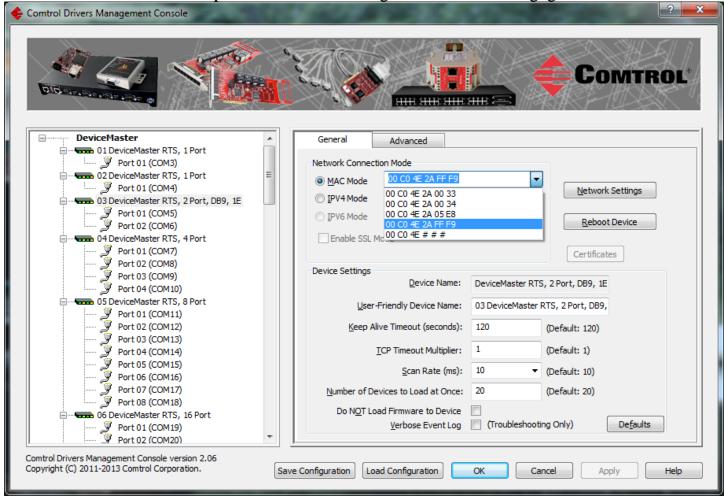
Previous versions of all of the above are still valid, but some screen shots may be different and minor other differences may be experienced.

The DeviceMaster Driver can communicate to the DeviceMaster hardware using one of two communications protocols. MAC mode (layer 2) and TCP/IP (layer 3). This document will attempt to describe and provide assistance when the Driver is unable to use the MAC mode of communications. If the Driver is unable to detect the DeviceMaster in the configuration from the drop down list for selecting the appropriate unit, then MAC mode will not work. Please note that only the model as shown in the name will be detectable. For example if you have a DeviceMaster RTS and installed the driver for a DeviceMaster PRO, the Driver will be unable to list the correct MAC addresses for the RTS model. This is also true when the wrong number of serial ports have been defined. There are several different instances in which the MAC mode of operation will not be possible and most will be described and in these cases using the IP mode will be required. There is no real disadvantage of using IP mode communications as opposed to the MAC mode communications in the Driver. In most cases this is only a matter of ease of total configuration.

We will assume that the DeviceMaster is attached to the network and powered on and that all LED's are indicating proper operation. The yellow Status/Power LED is on solid and blinks at 10 second intervals and the Ethernet LED's are showing Link status.

Here is an example of what the Comtrol Driver Management Console should show when MAC

mode is selected and the drop down arrow to the right of the field is engaged.



In this example the "03 DeviceMaster RTS 2 Port, DB9, 1E" model is selected in the left column.

In the General Tab there are several different 2 port units listed. Any of these could be selected but in this example the last listing is the selected unit. The drop down list will always display the 00 C0 4E # # # as this is a dummy placeholder.

If you are able to see some DeviceMaster units in this list, but not your specific DeviceMaster, then this document is not for you. This document is for the user that SHOULD see MAC listings but does not.

There are some different conditions to be considered when opening the Comtrol Drivers Management Console and attempting to install the MAC address in the driver.

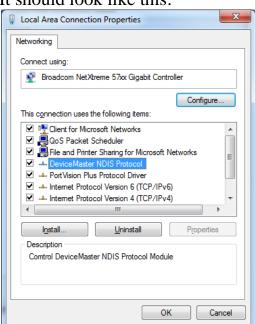
Begin with PortVision DX.

Is PortVision DX able to scan the network and discover the DeviceMaster?

YES (PortVision DX does Scan and discover the DeviceMaster)

- 1. Check that the correct model of DeviceMaster was installed in the Driver. If the wrong model was selected during installation (ex: you have a DeviceMaster RTS and installed the driver for a DeviceMaster PRO) the Driver will be unable to list the correct MAC addresses.
- 2. Open the Local Area Connection Properties and check to see if the DeviceMaster NDIS Protocol in loaded and check marked. In most cases if PortVision DX can scan and discover the DeviceMaster, then the Driver should also be able to discover the DeviceMaster.

## It should look like this:



If the protocol is not listed, manually install it by following these steps:

Click on the "Install.." button.

Select "Protocol" and click the "Add" button.

Click the "Have Disk..." button.

Click "Browse" and go to this folder:

 $C: \label{lem:control} \label{lem:control} C: \label{lem:control} Program \ Files \label{lem:control} \ Comtrol \label{lem:control} \ Device Master \label{lem:control}$ 

or

C:\Program Files (x86)\Comtrol\DeviceMaster\ Select any .inf file as the procedure will use the one that it needs.

Click : "Open" Click "OK"

In some cases a PC reboot may be required.

If after loading the DeviceMaster NDIS Protocol, the Driver is still unable to detect the DeviceMaster, it is probable that the IP mode will be required in the Driver. In this circumstance it is likely that we will be unable to determine the cause of the failure of the NDIS protocol.

## NO (PortVision DX Scans, but does NOT discover the DeviceMaster)

- 1. Check to see if a Firewall is installed and enabled. If it is, temporarily disable the firewall and scan again. If the scan now discovers the DeviceMaster, you will need to modify the firewall settings to allow traffic on port 4607. That procedure will not be covered in this document.
- 2. Is there a Router between the DeviceMaster and this PC? If there is, then the IP mode must be used as routers do not forward MAC packets and only deal with TCP/IP.

If PortVision DX is unable to discover the DeviceMaster, it is almost assured the Driver will be unable to discover and use the MAC mode. In this case, the DeviceMaster should be manually added to PortVision DX using the instructions found in the user guide. If the DeviceMaster is then seen to be operational in PortVision DX, the Driver will need to also be configured to use the IP Mode. If PortVision DX still cannot communicate to the DeviceMaster, then there are other possible causes.

- 1. Ethernet cable connected to the wrong Ethernet port on the DeviceMaster
- 2. No IP route to the DeviceMaster
- 3. Improperly configured NIC
- 4. Improperly configured NIC used in a Virtual Machine environment
- 5. NAT not configured
- 6. NIC's Teamed with an option not supported by 3<sup>rd</sup> party protocols
- 7. DeviceMaster routed through the wrong NIC in the PC
- 8. 3<sup>rd</sup> party application blocking Comtrol networking protocols
- 9. Faulty DeviceMaster. Check with a different PC