NIMIQ

*An Ethernet adaptor for
the Amiga 600/1200 Computers*

National Amiga
Products and Services International

NIMIQ Ethernet
for Amiga 600/1200 computers

Introduction to Networking Basics:

Networking hardware on the Amiga is quite simular to what it would be on an IBM PC or a Mac. The topology is all the same, just the cards and actual networking software is different. You can network all kinds of different machines together as long as they are using the same network type (in this case 10-megabit Ethernet) and using the same networking protocol. The most common networking protocol is TCP/IP, the same protocol that the Internet uses. This is available for Amiga's, PC's and Mac's.

You can also put machines on the network that don't necessarily have to talk with each other. For instance, Envoy is an Amiga only networking protocol that PC's or Mac's will not understand. Therefore if everything is set up properly, those other machines will just ignore the Envoy traffic on the network and pay attention to only information destined for them. The advantage of this is if you already have an installated network topology in a building or office, you don't have to run specific lines and use different hubs just to use your Amigas.

There are many many possibilities with networking. Just look at how the internet is changing the world. It's the largest network of computers in the world and getting larger every day.

10-base-T (10bT) commonly uses an RJ45 connector, like your telephone line, and then feeds into a network HUB. This hub has other computers plugged into it with simular network cards. You can directly connect 2 computers together with 10-base-T without the need for a hub by use a 'crossover' cable. See appendice for information on how to build your own cable.

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10-base-2 (10b2) is sometimes called BNC or coax, mainly because the connectors is uses are BNC and the cable is RG58 coax. 10-base-2 networks are commonly daisy chained computers one after the other. Up to 255 computers can be chained this way.

You will require a BNC T connector to plug onto the media coupler (included), and a 50 Ohm terminator (not included) if this is the last computer in the 10b2 line.

Most HUBs will also have a 10-base-2 connection on them allowing you to 'bridge' between 10-base-T and 10-base-2 networks.

Hardware Installation:
Included with the package is a media coupler. This is where you will find the 10bT and 10b2 connectors for connecting to your network. Extending from this coupler will be a small cable with a plug to connect into the PCMCIA card itself. It can only plug in one way to the card, but be careful, it is somewhat fragile.

Next plug the PCMCIA card into your Amiga's PCMCIA slot with the NA logo UP. The PCMCIA standard is hot swapable, meaning you can plug a card in or out while the power is turned on.

Connect your desired network type, 10b2, or 10bT to your media coupler. You can use one or the other, not both. The card will autosense which one is connected.

Now on to the software installation.

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Software Installation:

Envoy v2

When installing Envoy, you will be asked about your interface and will be given a choice or Commodore 2060, Commodore 2065 and Other. Choose other. It will then ask you to pick your device driver. Go to devs:networks and select cnet.device. And then unit 0. Continue as normal.

Inet 225

This can vary depending on how you set up Inet225. Typically when asked for the device driver that you will be using for your ethernet card, simply enter "devs:networks/cnet.device" and continue.

Miami v3

Run MiamiInit.
Select Ethernet, Cable/ASDL modem
Select PCMCIA Cnet-compatible board
Continue as normal.

Amitcp v4.x

When installing AmiTCP you will be asked to supply your device driver. Tell it to use "devs:networks/cnet.device" and unit 0. Continue as normal with the installation.

Please note! The Commodore Amiga 1200 PCMCIA slot
was missing the CARD RESET line when it was built.
This is not the case with the Amiga 600 and the majority
of the Amiga Technologies A1200s. Therefore on the
Amiga 1200s without the reset line you will sometimes
have to manually reset the card by removing the card and
plugging it back in after you RESET (IE: CTRL-A-A) the
Amiga. This is not needed if the 1200's power is turned
off and then back on.

You can have the CARD RESET line added to your
Amiga 1200. See appendice.

Appendices

10-base-T Cross Over Cable:

This cable is usefull if you are just networking two computers together using 10-base-T RJ45 style connections. The concept is identicle to a null-modem cable for serial ports.

You **WILL** require:
    10-base-T Catagory 5 cable to the length you need.
    10-base-T RJ45 Catagory 5 Crimp Ends
    10-base-T RJ45 Crimper Tool

Please note, this is the technical specification on how to build this cable, but we do NOT take any responsibility for the results of this opperation. Crossover cables are available from National Amiga and other sources.

Pin	One End	Opposite End
1	White/Orange	White/Green
2	Orange	Green
3	White/Green	White/Orange
4	Blue	Blue
5	White/Blue	White/Blue
6	Green	Orange/White
7	White/Brown	White/Brown
8	Brown	Brown

Nib down.

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Amiga 1200 Card Reset Line:

Please note, this is the technical specification on how to modify your Amiga 1200 and National Amiga DOES NOT take any responsibility for the results of this opperation. If you are unsure about how to do this properly then this modification can be done by National Amiga or any other Amiga service centre.
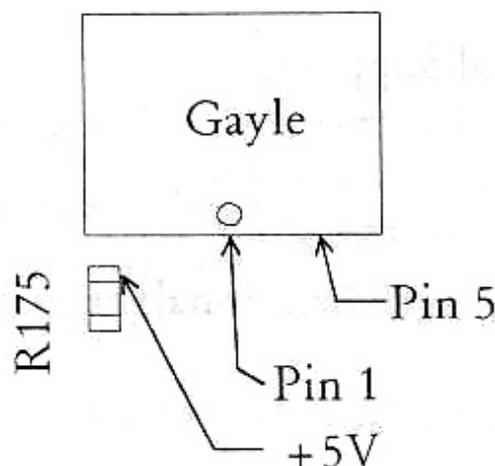
The Commodore A1200 seems to have a bug in its Gayle chip, as the CC_RESET line does not work properly! The ROM code called by CardResetCard is identical to the A600 (which does work properly) but when executed on the A1200 nothing happens at the pin...

To fix this a capacitor should be added to the CC_RESET line to help drive the reset.

Parts required:
1 x 10uF Capacitor

Gayle pin locations
 - Pin 5 (CC_RESET) is the 5th pin from the 'pin 1' marking.

Nimiq: *An Inuit word for any object or force that unites or binds them together*

Technical Support:
Technical support is available by the following methods:
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