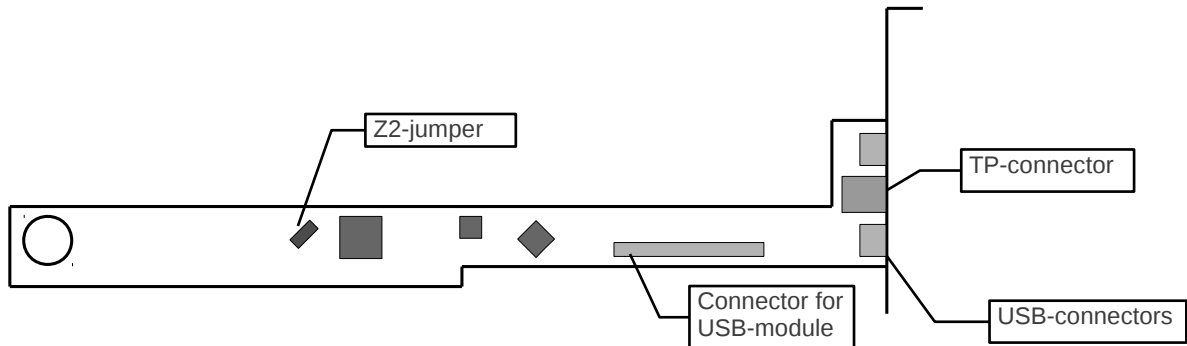


# X-Surf-100 installation



## **Hardware installation**

Insert the card into a free Zorro-2, Zorro-3 or Fast-Z2 slot. If the X-Surf-100 is used in a Fast-Z2 slot, it will work just like a Zorro-2 card (automatic identification as Z2-board). In a Z3-Slot of an A3000 or A4000, performance will automatically be higher. Only in rare cases it will be necessary to close the jumper on the X-Surf-100 to downgrade to Z2-speed.

The 48-pin expansion connector is meant exclusively for the USB module. It is not possible to connect anything else there. **Any attempt to connect something else to that pin header may damage the card and your computer!** Such a damage is not covered by warranty.

The two external USB connectors are not functional without the USB module.

## **Software installation**

We're assuming that you have read and understood the manual of your TCP/IP stack. Please understand that it's beyond the scope of a networking card's manual to describe other software. We have included a configuration file for AmiTCP and Genesis in the installation archive. You only need to edit that file to enter an IP address and standard route that suits your home network.

Please download the driver archive from our website <http://wiki.icomp.de/X-Surf-100> and unpack it. It contains different versions of the Sana2 driver for the different target systems:

x-surf-100.device000	for 68000 processors
x-surf-100.device020	for 68020 processors and for 68030 processors in Z2 systems
x-surf-100.device040	for 68040 and 68060 processors
x-surf-100.device030z3fd	for 68030 processors in Z3 systems (fast version)
x-surf-100.device030z3nd	for 68030 processors in Z3 systems (safe version)

Copy the file that suits your system to your directory `DEVS:networks/` and rename it to: „x-surf-100.device“ (without the quotes!). Please mind that there are only lower-case letters in this file name. The config file „x-surf-100.config“ must be copied to your directory `envarc:sana2/`.

Now set „`DEVS:networks/x-surf-100.device`“ as Sana-2 device in the TCP/IP stack of your choice. For AmiTCP and Genesis, we're providing an optimized configuration file in the „`amitcp`“ directory of the installation archive. Copy this file to your directory `AmiTCP:db/` to optimize the performance of your stack.

The program „`xsurftest`“ is a command line tool that lets you test the basic functionality of your X-Surf-100. You should only start this program if your TCP/IP stack is offline. The tool is only meant for diagnosis and support purposes. We recommend to re-start the computer after this tool has been run.

We're supporting development of drivers for NetBSD and Linux M68k. You can find closer information about these drivers on our website <http://wiki.icomp.de/X-Surf-100>.

### Connecting to a network

This manual does not try to be a complete manual on how to setup and wire a LAN (local area network). If you don't have experience in setting up a network, please refer to books dealing with this. Instead, we're trying to give you some basics that may make it easier to understand such a book.

Your X-Surf-100 has a twisted-pair (TP) connector. This kind of connector is also known as „RJ45“. Connect the X-Surf-100 to your router or switch with a sufficiently long cable. We recommend using shielded „Cat.5“ or better cables.

### Basic rules of TP-wiring

There are two kinds of TP cables: Crossover and 1:1 cables. You normally only need a crossover cable if you make a direct connection between two computers without a switch or router in between. X-Surf-100 will automatically detect the type of cable and will set the data direction accordingly without the need for a networking expert. Even if you are using the „wrong“ cable for your application, your X-Surf-100 will get a link and perform normally. This feature is called „Auto-MDIX“ and you can switch it off in the config file of the driver. However, we recommend to keep it enabled.

Connect every computer of your network to your Switch (many routers have a built-in switch, so there's multiple RJ45-connectors for multiple computers). If Computer A needs to communicate with Computer B, it will go through the switch. The switch is the middle of a star-shaped network.

You can check the connection between networking card and the switch by looking at the link LEDs of the switch and the X-Surf-100: About two seconds after powering up, the red LED on the X-Surf-100 and the corresponding LED on the port of the switch must be on. The link LEDs give you a simple way of checking cables. A TP cable may be hot-plugged, that means, you don't have to switch the computer off before connecting or disconnecting a cable.

### EU/CE compliance (this paragraph is in German for legal reasons)

Für das Produkt X-Surf-100 Ethernet wird hiermit bestätigt, dass es den gesetzlichen Anforderungen der Mitgliedsstaaten der Europäischen Union über elektromagnetische Verträglichkeit (89/336/EWG) entspricht. Zur Beurteilung der elektromagnetischen Verträglichkeit wurden folgende Normen angewendet: IEC 1000-4-4 BURST, IEC 1000-4-2 ESD, Kontaktentladung 6KV, DIN EN 50081-1 Fachgrundnorm Störfestigkeit, DIN EN 50082-1 Fachgrundnorm Störaussendung. Schließen Sie das Gehäuse und ziehen Sie alle Schrauben fest, insbesondere die Schraube, die das Abschlussblech der X-Surf mit dem Computer verbindet!

Voraussetzung für die Einhaltung der Grenzwerte der Störaussendung ist die Verwendung konfektionierter, abgeschirmter Kabel. Wird die Karte mit den falschen Kabeln betrieben, erlischt diese Konformitätserklärung. Ein Betrieb in Umgebungen mit lebensunterstützenden/erhaltenden Systemen ist mit den angewendeten Normen nicht zulässig.

### Support

If you need assistance with your networking card, **please contact your reseller first**. In the rare case that the technicians of your reseller don't find a solution, they will forward your case directly to individual Computers. Please understand that we can only answer direct support questions if they have been forwarded by your reseller, or if you have purchased the product directly in our online shop.

There have been misunderstandings in the past, because employees of resellers and individual Computers (technicians, developers, programmers) are active in Amiga-forums. However, these activities are pure hobby activities – these people care for the Amiga just like you do. Please understand that none of the internet-forums is a support forum for our products. The official support goes through your reseller only.

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