

## **AMIGA 3000 und AMIGA 3000T-Besitzer unbedingt beachten!**

Ausführliche Tests mit Amiga-Geräten des Typs A3000 und A3000 Tower haben ergeben, daß ein zuverlässiger Betrieb mit diesen Geräten in Verbindung mit ZORRO-3 DMA-Erweiterungskarten nicht zuverlässig möglich ist. Dies betrifft ebenso Geräte mit denen die CYBERSTORM MKII aufgerüstet werden kann, da der angesprochene Fehler prinzipieller Art ist und nicht durch den Einbau des CYBERSTORM MKII beeinflusst werden kann. Ein Betrieb des internen SCSI-Controllers im AMIGA 3000 und AMIGA 3000T ist jedoch ohne Einschränkung möglich.

Soll in einem solchen Fall das CYBERSCSI MKII-Modul ersatzweise verwendet werden, (bitte beachten sie die mechnischen Einschränkung des AMIGA 3000 Desktop) ist ein Rework der Mutterplatine notwendig, da die zu Funktion des SCSI-Controllers notwendigen Interuptleitungen nicht am Prozessor-Erweiterungssteckplatz anliegen. Durch nachträgliche Implementation dieser Signale durch Herstellen der notwendigen Verbindung (Signal INT2) ist der Betrieb gemäß der Funktion in AMIGA Modell 4000 und 4000T möglich.

Sollten Sie diesen Umbau wünschen, so wenden Sie sich bitte an Ihren autorisierten Fachhändler.

### **Important note for AMIGA 3000 and AMIGA 3000T users!**

Comprehensive tests of Amigas of the A3000 and A3000T series have shown, that reliable operation of ZORRO-3 DMA expansion boards is not possible with these machines. This also applies for expansions for the CYBERSTORM MKII since this failure is caused by the mainboard and may not be influenced in any way by the CYBERSTORM MKII. Error free operation of the internal A3000's and A3000T's SCSI controller is possible without any limitations.

If the use of the CYBERSCSI MKII module is desired (keep in mind the mechanical limitations for the A3000 desktop model) a rework of the A3000 motherboard is required, since the interrupt signals needed for the SCSI controller's operation are not supplied to the processor slot. By adding the required Signal (INT2) to the processor slot, operation of the SCSI module is possible as it is in the A4000 and A4000T models.

If you wish to rework your mainboard, please contact your local dealer.

# **CYBERSCSI MKII-Modul**

**Fast SCSI-II DMA Controller für das  
CYBERSTORM MKII Turbo Board\***

**Fast SCSI-II DMA Controller for the  
CYBERSTORM MKII Turbo Board\***

\*AMIGA 3000/3000(T)-Besitzer bitte unbedingt Umschlagsrückseite beachten!  
\*AMIGA 3000/3000(T) owner please pay attention to the back cover!

## **ANWENDERHANDBUCH USER'S MANUAL**



DIGITAL PRODUCTS

## Introduction

Thank you very much for choosing our product. By purchasing the CYBERSCSI MKII-Module, you have acquired a high-quality and perfected product which will set new performance standards in its class. Its most important features are:

- ▶ **FAST SCSI-II DMA Controller for the CYBERSTORM MKII Turbo Board**
- ▶ **Transmission rates up to seven Mbytes/sec. asynchronous and up to ten Mbytes/sec. synchronous on the SCSI-bus.**
- ▶ **Transmission rates up to seven Mbytes/sec. asynchronous and up to ten Mbytes/sec. synchronous on the SCSI-bus.**
- ▶ **The processor on the CYBERSTORM MKII Turbo Board is not burdened because of the DMA transmission (Direct Memory Access). The CYBERSCSI MKII-Module therefore is ideally suited for multimedia applications.**
- ▶ **Comprehensive software including the dynamic caching software DynamiCache and the CD-ROM file system CDrive facilitates working with slower SCSI devices and allows immediate connection of CD-ROMs.**
- ▶ **Made in Germany, 6 months warranty.**



## Scope of delivery

Check immediately after receiving your CYBERSCSI MKII-Module if delivery is complete. The shipment must contain:

- ▶ a board (the CYBERSCSI MKII-Module)
- ▶ the external connector and terminator
- ▶ a disk containing the installation software
- ▶ a SCSI cable for the internal connection of 2 hard disks
- ▶ a short SCSI cable for connecting the external connector and terminator to the CYBERSCSI MKII-Module
- ▶ this manual and a registration card

Should one of these parts be missing, please contact your dealer you have purchased your board from.

## Update of the SCSI device

Prior to operating the CYBERSCSI MKII-Module you need to update the driver software to the latest release. You will find a program called MK2UpDate on the SCSI-Tools Disk for that purpose. To do the Update, follow the steps described hereafter:

1. Switch off the computer and open the computer's case.
2. Set the Write-Protect-Jumper. The jumper is located on the CYBERSTORM MKII nearby the CPU. The Update of CYBERSTORM MKII's firmware is only possible with that jumper closed, since the firmware is protected from overwriting as long as the jumper is open.
3. Power up the computer and boot without Startup-Sequence. You do this by pressing both mouse buttons during boot up and selecting the „Boot with no Startup“ gadget.
4. Insert the SCSI-Tools Disk into drive DF0:
5. Type the command **df0:MK2UpDate** to the CLI. The command needs no further arguments.
6. After the program has finished the update, you will get the message „Update successful“. The actualisation of the firmware is finished.

## ADVICE

*If the updater gives any other message, it will also advice you, which steps a needed to complete the operation. Please follow these advices, since ignoring them can lead to malfunction or even destruction of the CYBERSTORM MKII*

7. Power of the computer.
8. Remove the Write-Protect-Jumper to avoid accidental modifications by buggy programs or overwriting of the CYBERSTORM MKII's firmware by older versions.

## ATTENTION

*If the Update is interrupted in any way before the success message was printed, e.g. power failure or user errors, please take the following advices. Ignoring them may result in a malfunctioning or broken CYBERSTORM MKII*

1. If the computer is still running, retry the update. Do not reset the computer. If the update fails continuously, refer to step 2.
2. Reset the computer. After release of the CTRL-AMIGA-AMIGA key combination the rainbow colour pattern of the CYBERSTORM MKII's startup should be displayed on the screen. If the rainbow pattern does not show up, power off the computer immediately! Rainbow pattern not showing up indicates a faulty configuration of the CYBERSTORM MKII's firmware caused by the interrupted update. A faulty firmware configuration can result in malfunction or even destruction of the CYBERSTORM MKII. Before attempting any further tries to get your system back working, please contact our support service for further advice.
3. If the rainbow pattern appears and the computer boots up, you may retry the update. In some cases, an interrupted update procedure may cause the CYBERSCSI MKII-Module to be not recognized due to a missing or incomplete scsi driver floppy disk. For these cases you need to boot the computer with any bootable floppy disk and follow the step-by-step instruction above beginning with step 1!



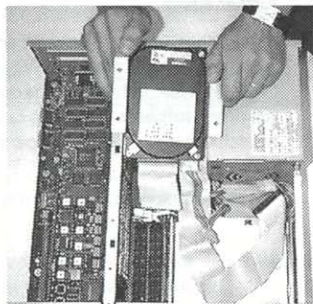
## Installation of the CYBERSCSI MKII-Module

The SCSI module is installed in the terminal block provided on the CYBERSTORM accelerator system. The card is relatively simple to fit but, if you prefer, your dealer can perform the installation (possibly for a small fee). Before starting to install the card you should always check the bus termination and the SCSI IDs of internally connected SCSI devices. The chapter „The SCSI Bus“ explains how to do this and how to adjust the settings on the module and board.

### Installing the SCSI Module

1. Switch your computer off.
2. Disconnect all cables from your computer (monitor, mouse, keyboard, other interfaces).
3. Remove the two screws that secure the casing cover. These are located on the back at the top left and right.
4. Remove the casing cover by carefully lifting it up. If you cannot do this, or if you require further information, please consult your Amiga User Manual.
5. The SCSI module is to be installed in the free terminal connector behind the CPU on the carrier board. It is, therefore, necessary to remove the rear drive holder.

To remove the rear drive holder undo the four fixing screws and lift out the disk along with its holder (see Picture 1). Remove the hard drive connector cables as they will need to be completely re-routed.



Picture 1:  
The AT bus hard drive  
to be removed

6. On the back of the Amiga 4000 is a covered opening for additional expansion options. This opening accommodates the external SCSI connector of the SCSI module. First remove the cover plate that sits over the opening and which is secured by two screws.
7. If you want to use IDE hard drives in addition to the SCSI devices, then both the floppy cable and the IDE cable must be re-routed. When the SCSI module is moved from the carrier board to the back wall of the casing it is no longer possible for the cables to pass behind the hard drive and they must now be passed along the side of the power supply (more precisely: between the power supply and the SCSI module). Fold the cables as shown in Picture 2 so that they are not in the way of the SCSI module.

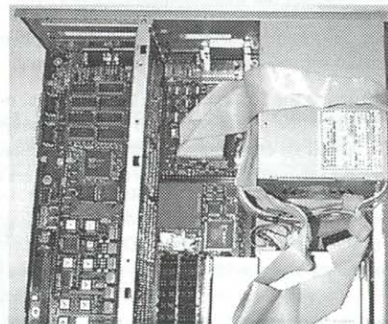
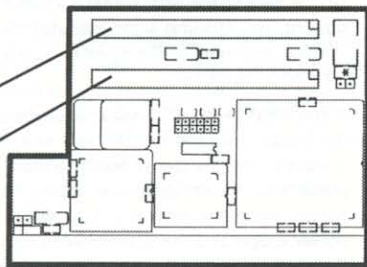


Bild 2:  
The new position of  
the AT bus cable

8. Connect the long 50 pin cable supplied to the internal SCSI connector on the SCSI module. If you are using a cable without coding, ensure that the coloured marking on the cable is towards the the edge of the internal SCSI connector marked by an arrow (see picture 3).
9. Connect the short 50 pin cable supplied to the external SCSI connector on the SCSI module. Ensure the correct alignment of the cable as described in step 8.
10. To install the SCSI module, take the end of the card with the short flat cable connector. First, place this connector on the carrier board and then fasten the external SCSI connector into the free expansion slot (see Picture 4 and Picture 5). Tighten the fixing screws in the retention plate on the outside of the casing.

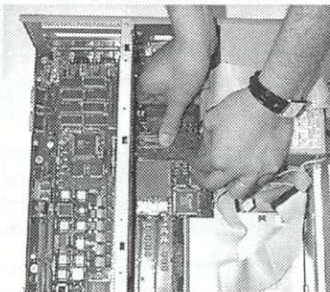
Picture 3:  
Connectors of the  
CYBERSCSI-Module

Connector for internal cable  
Connector for external cable



11. Connect the short SCSI cable to the external SCSI connector / terminator.
12. Lay the internal SCSI cables as flat as possible forwards over the SCSI module for connection to the internal SCSI drive.
13. Insert the SCSI cables into the connector on the SCSI hard drive. Pay particular attention to the cable and board markings. Normally, the side with which the coloured cable markings should be aligned is marked with a dot or an arrow on the hard disc but many manufacturers also print instructions on the board

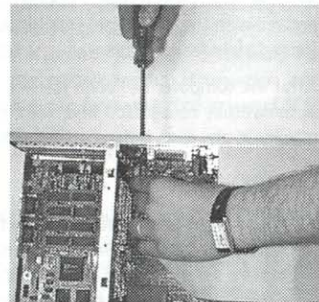
Picture 4:  
Installation of the  
CYBERSCSI-Module



relating to the SCSI connector's pin numbers. As the coloured marking on the cable identifies pin number 1 it must, therefore, be on the side of the connector that is marked with 1 or 2. Many hard drives identify pin 50 instead of pin 1 or 2 of the connector. So, if 50 is written on the SCSI connector of your hard drive the cable marking must be aligned with the other side of the connector.

If there is no identification mark on the board please refer to the instructions for your hard drive.

Picture 5:  
The installation and  
positioning of the  
external SCSI connector



14. Screw down the SCSI hard drive in the holder (the AT hard drive that is already fitted is the best installation guide). If you are installing a SCSI hard drive in 3 1/2 inch format with a module height of 1 inch and you want to continue operating the AT hard drive, you can install your SCSI hard drive into the same frame. You should be aware, however, that this will increase the amount of heat generated. If you only want to use the SCSI hard drive you should remove the AT hard drive. If both installation slots in the hard drive frame are already occupied you can install the drive in the floppy holder (you may need to obtain an installation frame from your dealer). This also applies to the hard drive or removable drive in a format larger than 5 1/4 inches for which a separate installation slot is provided in the Amiga 4000. Consult your Amiga 4000 user manual for more details.
15. Place the drive holder containing the hard drive back into the Amiga and tighten the four screws.



## Connection of already RDB-formatted SCSI-Drives

If you connect a hard disk (or resp. another SCSI-unit) to the CYBERSCSI MKII-Module, which was formerly operated on a SCSI-controller in the AMIGA and formatted with the RDB (Rigid Disk Block) according to AMIGA-standard, this unit is immediately ready to use.

After the computer has been started, the partitions existing on this disk must be automatically recognized and, resp. even booted. If this is not so, contact your retailer in any case, before undertaking further measures.

### ATTENTION!

*If you want to connect hard disks which you already operate at a different controller, and on which data are memorized, we urgently recommend to make a safety backup of the hard disk before removal out of the old system. Each new connection of an already operated hard disk bears the risk – if ever so small – of a data loss through error at installation or putting into operation. If the backup on floppy disk seems too slow, ask your retailer if he could take over the backup and re-installation for you (e.g. on a streamer), or if you could borrow a streamer, possibly against a low fee. We expressively state that we take over no warranty whatsoever for data losses on hard disks or SCSI-units which have been previously used before being connected to the CYBERSCSI MKII-Module.*

## Connection of External SCSI-Devices

To the 50-channel HighDensity Fast SCSI-II connector of the CYBERSCSI MKII-Module you can connect external SCSI-units with a commercial brand SCSI-II cable. Most external SCSI-units are furnished with 50-channel Centronics-connections, so that for those a cable with 50-channel SCSI-II-plug on one side and standard SCSI Centronics 50-pole plug on the other side can be used. Further SCSI-units can then be connected via the first unit, while between the units generally cables with 50-channel connection on both sides are used. In any case, you have to take care of correct bus-termination (see SCSI-bus termination), as otherwise problems with the data transmission could occur.

During operation, you have to take care that the power supplies of the external units should always be activated before switching on the computer, and deactivated only after the computer has been switched off.

## The SCSI-bus

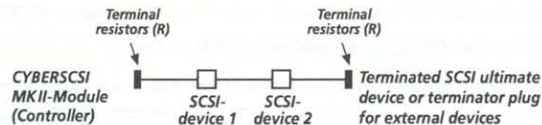
### ATTENTION!

*For the connection of external SCSI-units only top-quality screened cables are admitted, which comply with the valid standards (CE, FCC, or similar). For purchasing such cables, which offer the corresponding attenuation properties, please turn to your retailer. Please also be aware that external SCSI-units have to fulfill the valid standard norms!*

## SCSI-bus termination

To grant a faultless, unimpaired function for the SCSI-bus system, the SCSI-bus has to be terminated electrically correct. You can think of the SCSI-bus as a single cable, which has to have a terminal resistor at each end. The single units are then directly connected to this cable. It follows that the termination resistors may only be installed on the first and last unit. In this regard, the controller counts as one unit. (see illustration 6). The SCSI-module is furnished with an active termination, which automatically switches on and off, depending on if external SCSI-units are connected or not. (please also see the chapter „SCSI termination jumper“.)

On the usual SCSI-units such as hard disks, alternation disk drives, or streamers, termination resistors are also installed. The termination resistors generally are



Picture 6: Example of a SCSI-chain with properly set terminal resistors

positioned close to the SCSI-plug. If the resistors are socketed, you can simply remove them if required. Should the resistors not be socketed, (which is sometimes the case for newer SCSI-units with SMD-soldered resistors or active termination on the unit-side), there generally exists a jumper or switch on the SCSI-unit, with which it can be switched off. For the localization of such jumpers or switches, or if you have problems to identify the termination resistors, please refer to the documentation of the corresponding SCSI-unit. With external units (e.g. scanners) or external drives it could be, depending on the supplier or delivery scope, that instead of resistors installed on or in the unit, an external SCSI-termination plug is positioned on one of two external SCSI-connections.

**ATTENTION!**

*The correct termination is inevitable for a faultless operation of the controller and other connected units. An erroneous termination can lead to data transmission errors, non-recognition of SCSI-units, or in the worst case, to data losses on the memory media. Please take greatest care that the termination is made correctly.*

**NOTE!**

*If you remove terminal resistors, please do not forget to note down the fitting position, in case you have to re-insert the resistances. In most cases there is a marking on the board, which has to be in accordance with the point on the resistor.*

Basically we can distinguish the following four connection combinations for the termination (what is said in the following for „hard disk“ is of course also valid for other SCSI-units).

**Operation of the SCSI-controller with an internal hard disk**

Attention has to be paid that the termination resistors are installed on the hard disk. For the connection of the hard disk with the SCSI-controller use the respective plugs at the end of the internal SCSI-cable.

Position of the SCSI Termination Jumper in this case: **ON** or better **AUTO**

**Operation of the SCSI-controller and several internal drives**

The terminating resistors must be installed on the disk drive at the other end of the internal SCSI cable. The SCSI-controller must be connected to the first connector on the SCSI cable and a hard disk must be connected to the last connector. Additional disk drives can be connected to any free connectors on the internal SCSI cable.

Position of the SCSI Termination Jumper in this case: **ON** or better **AUTO**

**Operation of the SCSI-controller with external units without internal hard disks**

If you connect units via the external SCSI-connection of the SCSI-controller, without having internally connected a SCSI-unit, termination resistors may and must only be existent for the last unit, and the termination jumper on the external SCSI-plug has to set from **AUTO** to **ON** (see chapter „SCSI Termination Jumper“). As external units are mostly furnished with two SCSI-connections, to loop through

the SCSI-bus, (i.e. to connect together several external SCSI-units in series), then the termination resistors should not be assembled on the SCSI-units (i.e. the hard disks, alternation disks, streamers, etc.) themselves. It is better to use a SCSI-termination plug, which is plugged in the free SCSI-connector on the last unit, this makes it possible that external units are looped in serial, at which only the termination plug again has to be plugged into the last free connection of the last unit. SCSI-termination plugs are available from retailers.

**Operation of the SCSI-controller with external units and internal hard disks**

External units have to be terminated as described in the previous paragraph. Internally, only one SCSI hard disk should and may be terminated, and this must be connected to the last plug of the internal SCSI-cable. The other end of the internal SCSI-cable is plugged into the SCSI-controller.

Position of the SCSI termination jumper in this case: **AUTO**

**Adjustment of the SCSI-ID of the connected units**

For the distinction of different units, which are connected to the SCSI-bus, SCSI-units have a so-called SCSI-ID which can represent a value from 0-7. The integrated SCSI controller on the CYBERSCSI MKII-Module itself has the ID 7. This means that to one CYBERSCSI MKII-Module up to 7 SCSI-units with the IDs 0-6 can be connected. If more SCSI-units shall be connected to the CYBERSCSI MKII-Module, then the SCSI-IDs of these units have to be adjusted so that no unit has the same ID. The SCSI-ID for external SCSI-units is generally adjustable with a small switch by the user. Herefore please consult the documentation of the corresponding SCSI-unit.

**ATTENTION!**

*If two units are connected to the CYBERSCSI MKII-Module with the same SCSI-ID, this could damage one of the SCSI-units. In any case, only one unit is recognized by the CYBERSCSI-software. Vice versa, if after the connection of e.g. a new hard disk this unit is not recognized by the CYBERSCSI-software, this may be a hint that possibly a SCSI-ID is adjusted at this board, which is already occupied by another unit. The same is of course also valid, if a new disk appears, but suddenly a earlier connected unit can no longer be called. To avoid operation of two SCSI-units with the same ID in any case, you should check before the connection of a new SCSI-unit with the CYBERSCSI-software (e.g. the Program Unit Control) which SCSI-IDs are already assigned/occupied.*



**NOTE!**

The sequence in which the SCSI-IDs are assigned can principally be freely chosen, i.e. neither must the SCSI-IDs be assigned continuously, nor does the selectable SCSI-ID depend on the position of the unit in e.g. a series of connected disks. Nevertheless it is recommended to assign the ID 0 to the first connected unit, and to assign later connected units with the following IDs in ascending sequence, as this can considerably shorten the system start-time.

**ATTENTION**

With some hard disks it could happen that they do not work properly on the SCSI-ID 0. In this special case, please change the SCSI-ID on to any other ID.

**SCSI configuration**

The CYBERSCSI MKII-Module is provided with different possibilities for the SCSI-configuration. These are adjusted via the SCSI-device-config-jumper. The SCSI-device-config-jumper are below the plug for the external SCSI-cable (see Picture 7)

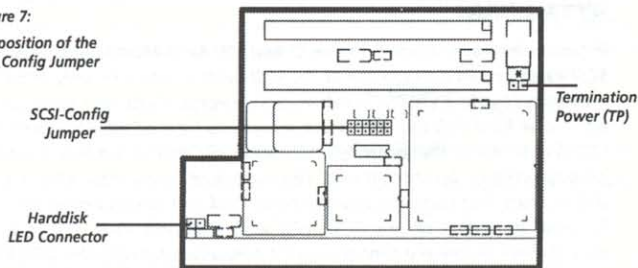
**SCSI config jumper**

The jumpers are continuously numbered from 0 to 5, while jumper 0 is at the left side and jumper 5 is at the right side. (see Picture 7).

The individual jumpers have the following functions:

**Jumper 5: reserved (open)**

Picture 7:  
The position of the  
SCSI Config Jumper



**Jumper 4: Synchron Auto-Enable (closed)**

If this jumper is connected, the SCSI-controller evaluates at connected SCSI-units (especially hard disks and removable disks) information eventually entered in the RDB (Rigid Disk Block), if the hard disk is to be operated in the synchronous mode, and then activates the synchronous transmission mode automatically. If this jumper is not connected, then an eventually existing synchronous entry is ignored, and the hard disk is operated in the standard-asynchronous-mode.

**Jumper 3: Slow cable mode (open)**

This jumper should only be connected if during the usage of extremely long cables, especially at the connection of external SCSI-units, transmission problems occur (normally only for cable lengths > 5m).

**Jumper 2: Slow Inquiry Mode (open)**

This jumper should be set when hard disk (which can occur especially with older models), after the computer has been switched on are not directly recognized, but only after another reset. This is due to too long a warm-up time of the hard disk. With the slow inquiry jumpers, the time is prolonged, for which the SCSI-controller waits for the reaction of the hard disk after the first request.

**Jumper 1: reserved (open)**

**Jumper 0: Debug mode (open)**

Only for test purposes by authorized service personnel.

**SCSI termination jumper** (see picture 8)

**1-2: AUTO (Auto Detect)**

The termination resistors are activated, but are switched off through plugging in another external cable. This adjustment must be set, if you have connected one or more SCSI-units, notwithstanding if external units are connected or not.

**2-3: OFF (Termination OFF)**

The termination resistors are switched off not depending on the connection of an external cable. This adjustment is not to be used in standard operation.

**Open: ON (Termination ON)**

The termination resistors are activated not depending on the connection of an external cable. For explicitly switching on the termination through an experien-



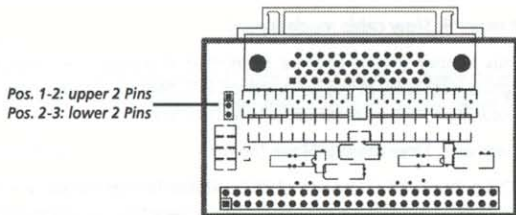
ced user.

### Termination power (TP) connected

If this jumper is connected, the SCSI-controller activates the supply voltage for the termination resistors on the SCSI-bus. (see picture 7)

## The SCSI software

Picture 8:  
The SCSI  
Termination Jumper



The disk included in the delivery contains comprehensive software for the installation of the hard disk, as well as for individual adjustments. Furthermore, a CD-ROM file system and the changing software DynamiCache are included in the delivery scope, which can be used for increasing the performance in many applications.

The documentation for the delivered software is contained on the disk in form of a Doc-File. This can be called and explains the functions of the software.

The SCSI software is installed by opening the disk-icon on the SCSI-tools disk through doubleclicking. On this disk, you shall find an icon with the label Install. Before using the SCSI-tools, you have to start this program by doubleclicking on the icon once. The installation is then carried out by an installer script.

## Error tracking

### Error: The computer can't be started

Check if the mains cable has stable contact. If this is so, kindly contact your retailer.

### Error: Autoconfig-error

If after the starting of the computer resp. after a reset a red screen appears with the title „Expansion Board Diagnostics“, then please refer to your retailer.

### Error: No conneted SCSI-unit is recognized

Check if possibly the CYBERSCSI MKII-module itself is not configured (by means of the program „Show Config“ in the tools directory of the workbench). If this is the case, please refer to your retailer. Under correct configuration of the CYBERSCSI MKII-module, please also check all the items of the next error description.

### Error: A new SCSI-unit is not recognized

Check if the unit is conected to the internal power supply. for external units: Check if the mains cable of the external unit is connected correctly, and if the unit is switched on. Check the SCSI-ID of the connected units. Check the connection of the SCSI-cable on the CYBERSCSI MKII-module and on the SCSI-unit. For external units check the correct position of the external SCSI cables. Check the correct SCSI-bus-termination.

If necessary exchange the cable or connect (for internal units) the SCSI-unit to another plug of the cable, to find out eventual errors of the cable.

### Error: The partitions of a disk which was formatted earlier are not recognized

First you should check with the program Unit Control which is delivered together with the CYBERSCSI MKII-module if the respective hard disk is physically recognized. If this is not the case, please carry out the instructions of the previous error description. If the disk is recognized, check if the formerly used controller was RDB-compatible, and also oblige the step-by-step instruction for the configuration of a hard disk. If with the instructions given there you still can not configure the disk, please refer to your retailer before you undertake further measures.

### Error: During operation of a hard disk, transmission errors occur

Check the correct SCSI-bus-termination resp. termination of the individual conected units. Check the SCSI-IDs of the connected units. Check the correct termination of the SCSI-cable. If necessary exchange the cable, to find out possible cable malfunctions.

Another cause for transmission errors could be if a SCSI-unit, especially during operation with long cables, is operated in the synchron-mode with high transmission rates. In this test try to decrease the transmission rate by means of Unit-Control.

### Problem: A SCSI-unit works slower than expected.

Check the correct adjustments of the synchronous transmission and the mask- and

maxtransfer-values of the concerned partitions. You can use the program check-Mask for this purpose. Check for partitions operated under AMIGA -DOS if those are operated with the FastFileSystem (FFS). The adjustment FastFileSystem International Mode (FFS Int). can cause performance losses, also the AMIGA-DOS formatting with directory cache often leads to a considerable decrease of the transmission rate. If necessary check if the hard disk is fully utilized, and the files are distributed over many tracks. in such a case it can be sensible to optimize the hard disk, special programs for this purpose, so-called disk-optimizer, are available. Please pay attention to the operating instructions when using such programs.

#### **General remarks to the error tracking**

Another reason for errors which often causes unexplicable malfunctions of the system, is the usage of non-system conform software, which for example does not work correctly with the Workbench 3.1 of the AMIGA 4000. This could also be seemingly unimportant, little utility programs, which are e.g. called in the startup-sequence. If you have an individually configured system, it is important, that you eliminate this error source also, by executing a test with a standard configuration.

Should you have problems, which do not correspond to the above listed, or which can not be eliminated with the proposed solutions, please refer to your retailer. Before calling him, make a very precise error description, which states your system configuration as well as resp. system error numbers in case of system breakdowns, and keep pen and paper ready.

## **Guarantee, Technical Advising and Service**

### **Guarantee terms**

On this CYBERSCSI MKII-Module, phase 5 digital products gives a guarantee of 6 months for components and processing, starting with the date of first sales. (Date of the retailer's bill issued to the registered final customer). Within this guarantee period, we eliminate all defectives, at our free choice either by exchange or repair, which are due to material or production faults. Through the execution of guarantee services, the guarantee period is by no means affected. Considering the included software (DynamicaCe/Cdrive), this guarantee refers only to the data carrier (disk).

Excluded are guarantee services for damages or malfunctions, which have been caused by outside interference or improper usage, especially also unauthorized repair. Modifications of the hardware, of what kind so ever, make the guarantee claim null and void.

also excluded are guarantee services for malfunctions or function disturbances on the CYBERSCSI MKII-Module, on other units connected on/to the AMIGA, or of the AMIGA itself, which occur after the assembly of the CYBERSCSI MKII-Module or later modifications of the system (as e.g. the insertion of new expansions), as far as it can not be doubtlessly proven that a technical defect of the CYBERSCSI MKII-Module is the cause of the malfunction or function disturbance. Modifications of the hardware and/or software of the AMIGA are expressively included, which are carried out through the company AMIGA Technologies in form of repairs, upgrades, or system-updates.

phase 5 digital products takes over no warranty what so ever that this product is suited for a certain application. Furthermore, we take over no liability for defects or damages on other units than the CYBERSCSI MKII-Module, as well as expressively not for the loss of data, which are or seem to be in direct or indirect connection with the usage of the CYBERSCSI MKII-Module or the included software (DynamicaCache/Cdrive), even if we have been informed about the possibility of such a connection in advance. For also delivered hard disks or other SCSI-units, exclusively the guarantee conditions of the respective producer are applicable.

In any case please return your registration card stating the date of purchase and serial number of the CYBERSCSI MKII-Module, so that in case of problems or guarantee handling this can be processed without further demands or delays.



## Technical advising and service

Should you need technical information e.g. for the assembly, expansion or compatibility of your system configuration, please refer to your retailer, who will advise you with corresponding competence and offer you the suitable expansion products. The experienced AMIGA- resp. phase 5 digital products retailers have the necessary knowledge as well as additional service informations, which will contribute to fast problem solution in case of simple technical problems or compatibility matters. Also for the assessment of possible guarantee cases (please also refer to the chapter „Handling of guarantee cases, returns“) your retailer can assist you.

Furthermore, starting with the end of February, you will receive comprehensive support informations through our World Wide Web-server in the Internet. You will reach our home page under:

 <http://www.phase5.de>

Here you can request all sorts of technical information to actual and future products, which are important for general information or technical support. These information are permanently actualized, and contain e.g. hints to tested and suitable hardware expansions or well-known error sources and compatibility restrictions as well as tips and infos for solution of occurring problems. Of course actual software updates can be downloaded as well.

Actual updates of software drivers for our products, as far as available, can also be obtained through our ftp server. You will reach our ftp server under :

 <ftp://ftp.phase5.de>

Should your retailer at times be not able to help you, or you have no access to our electronic support media, please refer in writing, by fax or by phone to our support department (see next chapter „Support, guarantee handling, returns“).

## Support, guarantee handling, returns

For the handling of guarantee cases, in Germany please contact.

*phase 5 digital products*

*In der Au 27*

*D-61440 Oberursel,*

*Germany*

*Support department: +49 (0) 6171 583788*

*Telefax: +49 (0) 6171 583789*

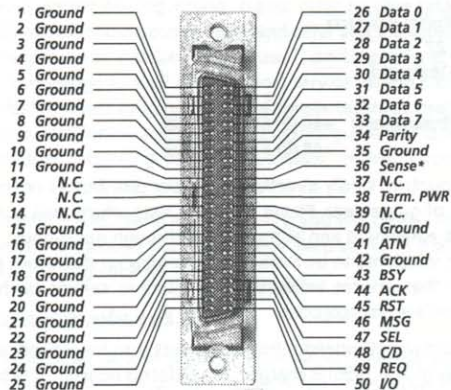
In all other countries kindly directly contact our distributors or your retailer for the handling of guarantees. Please be aware that returns will only be accepted after advance agreement and authorization through our support. This assigns a RMA-number, which has to be marked good legibly on the return package. Please be aware that returns **without** RMA-number cannot be handled. Also, **unfree** returns are not accepted.

As far as in case of authorized return, no defect is to be noticed, a handling fee of DM 50,- (as of July 1996) is charged. If a defect is noticed, which is not subject to the guarantee handling, then the handling fee and in case of repair also a repair fee which depends on the defect is charged.

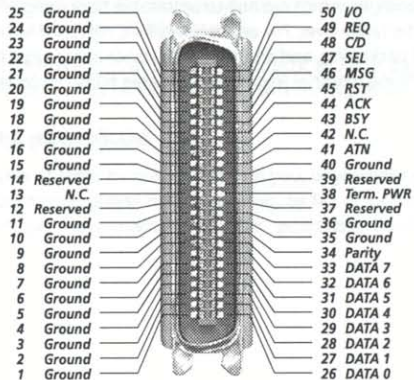
For transport damages, which are due to unsuitable packaging of returns of units, no liability can be taken over. For any return of a CYBERSCSI MKII-module always use the original packaging, and additionally a stable outer wrap (e.g. postal package) and resp. filling material (e.g. biodegradable filling materials).



SCSI bus pin assignment



External SCSI-socket at the CYBERSCSI MKII-Module (SCSI-II 50-pole)



Connection cable assignment (Centronics 50-pole)