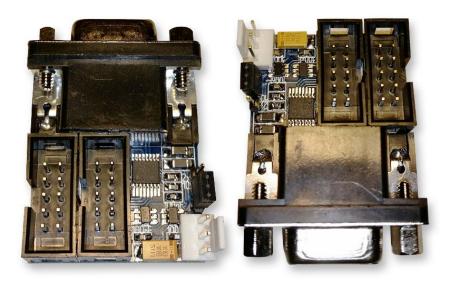
# **RATTE AUTO MONITOR SWITCH**

#### Installation Guide



Version 1 (Black VGA Connector)



Version 2 and above (Blue VGA connector)

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## Preface

The Ratte Auto Monitor Switch is an automatic monitor switch for Amiga 1200/3000(T)/4000(T) that can either be controlled via the CTS signal from CIA-B or manually with a jumper. Instead of having two monitors connected to your Amiga you only need one.

The switch itself is controlled from an installed Workbench program that is started from S:Startup-sequence. The program, SwitchControl, is recommended to install in C: on your system.

I recommend to install the program before installation of the Ratte Auto Monitor Switch.

Please note that the "SwitchControl" program is designed for Amiga OS3.x .

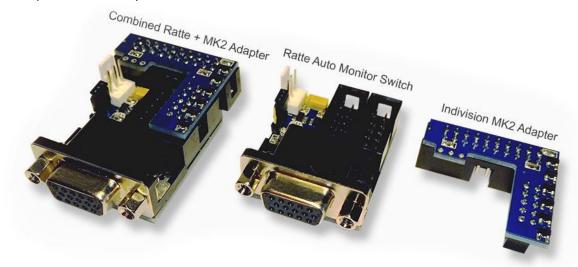
The installation is fairly easy but if you are the least unsure, please let a professional install the Ratte Auto Monitor Switch for you. All installations are done at own risk.

This is a Do-It-Yourself project that was made by Ratte.

# **Parts** Ratte Auto Monitor Switch

Depending on what was ordered, the content of the package can vary. If you ordered package 2, an extra adapter will be included that is connected into socket "A".

This adapter is exclusively for Indivision AGA MK2.



## CIA-B Adapter

The CIA-B adapter with cable design depends on what Amiga it will be installed in. It is the same CIA-B adapter for Amiga 1200/4000/4000-T (PLCC 44pin) but other for Amiga 3000/3000-T (DIL 40pin).

#### Note !

Cable colors may vary. Latest version is grey and are more flexible and easier to work with.

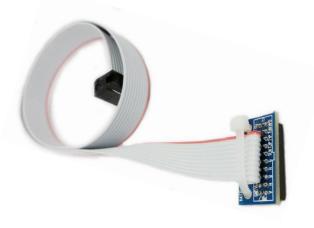


## Cables

There are three types of cables that could be chosen at purchase. Depending on what setup, the cables are the following

Source	Type of cable	Marking
Indivision AGA MK1	Straight 10pin-10pin connector	Α
Indivision AGA MK2	Use original cable from MK2	n/a
Indivision AGA MK2cr	10pin to 20pin 2.0 pitch	Α
Other scandoublers	10pin to VGA	Amiga
Amiga 3000 VGA (Amber)	10pin to VGA	Amiga
Voodoo / Other RTG	10pin to VGA	RTG
Cybervision 64/3D	Straight 10pin-10pin connector	В

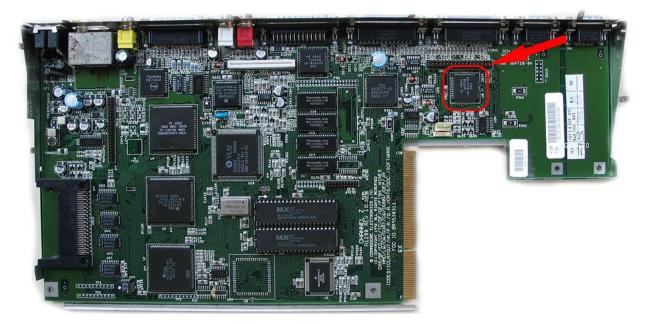




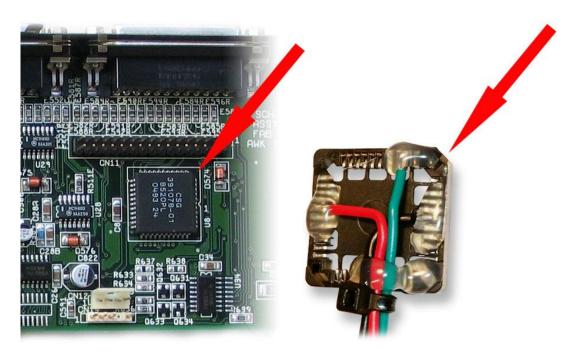
# Installation

#### Amiga 1200

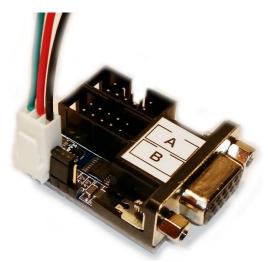
Remove the screws, top and metal shield if this haven't been done yet to reveal the mainboard of the Amiga 1200. Locate the CIA-B chip located at U8 near the IDC connector for the floppy drive.



Notice that the corner of the CIA-B adapter is beveled, also is the CIA-B chip (**U8**). You need to align the corners and then gently but firmly push down the connector on top of the CIA-B chip.



Connect the CIA-B adapter to the Ratte Automatic Monitor Switch as the picture below shows.



Connect "**A**" to the Indivision / Other scandoubler and "**B**" to the RTG / Voodoo card with the cables that was included in the shipping.

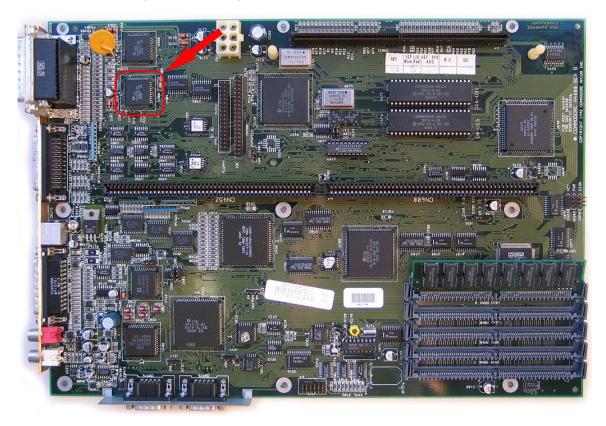


#### **IMPORTANT!**

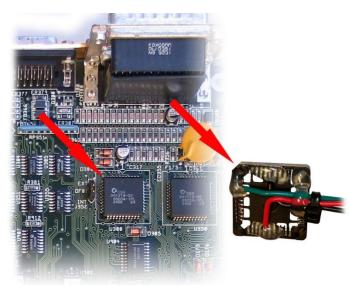
It is <u>VERY</u> important that cable "**A**" is connected to slot "**A**" and cable "**B**" is connected to slot "**B**" on the Ratte Auto Monitor Switch. If this they are connected in the wrong slot, it might damage both your Amiga and Ratte Auto Monitor Switch.

## Amiga 4000D

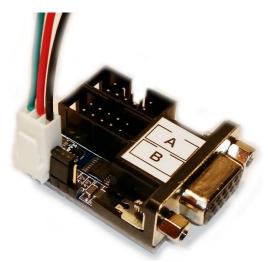
Remove the two screws at the back of your Amiga 4000 and then lift of the top. Usually the HDD has to be removed before the CIA-B adapter can be mounted on the CIA-B chip. The CIA-B (**U300**) can be located where the arrow points at in the picture below.



Notice that the corner of the CIA-B adapter is beveled, also is the CIA-B chip (**U300**). You need to align the corners and then gently but firmly push down the connector on top of the CIA-B chip.



Connect the CIA-B adapter to the Ratte Automatic Monitor Switch as the picture below shows.



Connect "**A**" to the Indivision / Other scandoubler and "**B**" to the RTG / Voodoo card with the cables that was included in the shipping.

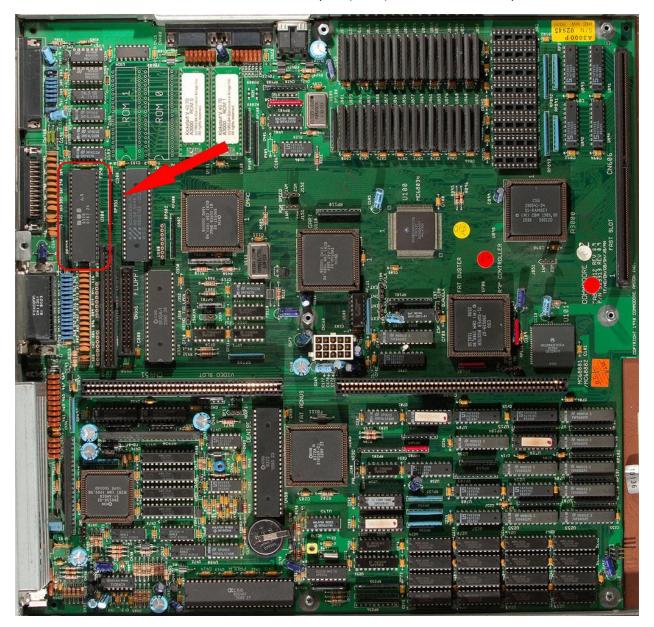


#### **IMPORTANT!**

It is <u>VERY</u> important that cable "**A**" is connected to slot "**A**" and cable "**B**" is connected to slot "**B**" on the Ratte Auto Monitor Switch. If this they are connected in the wrong slot, it might damage both your Amiga and Ratte Auto Monitor Switch.

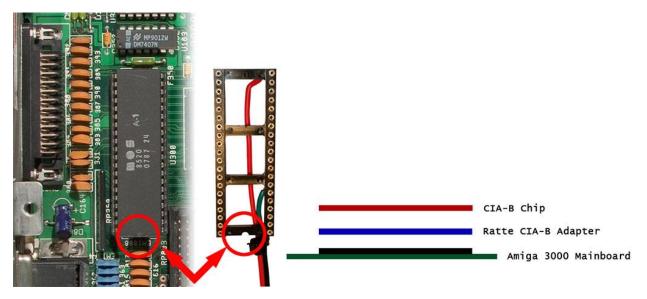
## Amiga 3000

Remove the top the Amiga 3000 case and then remove both the PSU, HDD and the protecting metal above the mainboard. The location of the CIA-B chipset (**U300**) can be found in the picture below.



<u>Carefully</u> remove the 40 pin DIL chip (**U300**), preferably by with a DIL-chip removal tool or Google for the safest way to do it. When the CIA-B chip is removed, mount the CIA-B adapter in the socket on the Amiga 3000 mainboard and then re-install the CIA-B chip in the newly installed CIA-B adapter.

Notice the little half circular cut-out in the socket on both the mainboard and the CIA-B adapter.



Connect the CIA-B adapter to the Ratte Automatic Monitor Switch as the picture below shows.



Connect "**A**" to the Indivision / Other scandoubler and "**B**" to the RTG / Voodoo card with the cables that was included in the shipping.

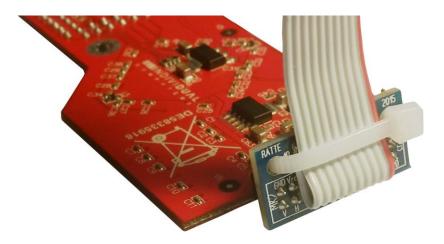


#### **IMPORTANT!**

It is <u>VERY</u> important that cable "**A**" is connected to slot "**A**" and cable "**B**" is connected to slot "**B**" on the Ratte Auto Monitor Switch. If this they are connected in the wrong slot, it might damage both your Amiga and Ratte Auto Monitor Switch.

# Indivision MK2cr Cable Connect the cable

The connector on the MK2cr cable does not have any pin/guide so it is very important to connect the cable in the correct direction. The cable must be pointing upwards from the Amiga motherboard as the picture below shows.



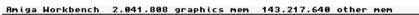
# SwitchControl

#### Download and installation

- 1) Download SwitchControl at https://www.ikod.se/wp-content/uploads/files/switchcontrol.lha .
- 2) Unpack the **switchcontrol.lha** archive on your Amiga. A folder named "**SwitchControl**" will be created with two subfolder named "**external**" and "**internal**".
- 3) Copy the "SwitchControl" file located in "internal" to C: on your system partition.
- 4) Start your favorite text editor and edit S:Startup-Sequence.
- 5) Place a line with "C:SwitchControl" preferably before the line with "IPrefs", see below.

#### IMPORTANT!

S:Startup-Sequence may vary depending of version of AmigaOS / installed programs.





- 6) Save and restart your Amiga.
- 7) Done...

# References

#### Connectors and Jumpers

There is one connector and one PIN-header on the Ratte Auto Monitor Switch. Those are connector provides the needed voltage and ground for the switch but also the CTS-signal that is used to control which source to use while the switch is in auto-mode (default setting).



## **CIA Connector pinout**



### SRC Jumper setting

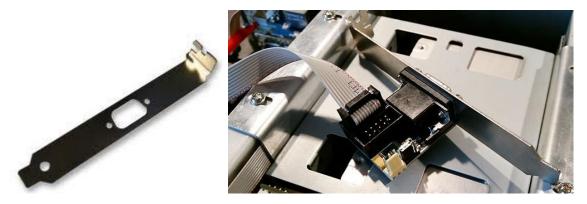
If you have problem with a blank picture, you can try removing the jumper or move it from the default position to the right-most position for RTG only. See description below.

Automatic mode (Default)
RTG Only
Native Only (No Jumper)

Image: Comparison of the state o

# **Extras** PCI-Bracket

It is recommended to mount the Ratte Auto Monitor Switch in a PCI-Bracket for VGA (not included) if it is being used in an Amiga 1200T / 4000D / 4000T / 3000D / 3000T.



If you have such bracket at home, it is easy to assemble the switch on it. A PCI bracket with a 9 pin serial D-Sub also works.