



INTEL

AMD

Dear customer,

Thank you very much for choosing the Noctua NH-U12S redux.

True to the spirit of Noctua's redux line, the NH-U12S redux is a streamlined, accessibly priced version of the iconic NH-U12S that has established itself as a benchmark for slim, highly compatible 120mm CPU coolers.

I'm confident that you will be able to sense some of the research, attention and care we've put into making this product.

Enjoy your Noctua NH-U12S redux!

Yours sincerely,



Roland Mossig, Noctua CEO

This manual will guide you through the installation process of the SecuFirm2™ mounting system step by step.

Prior to installing the cooler, please consult the compatibility centre on our website (ncc.noctua.at) and verify that the cooler is fully compatible with your motherboard.

Please also make sure that your PC case offers sufficient clearance for the cooler and that there are no compatibility issues with any other components (e.g. tall RAM modules).

Double check that the heatsink and fan clips do not make contact with the VGA card or other PCIe cards. Noctua cannot be held responsible for any damage or losses caused by compatibility issues.

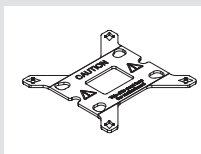
Should you encounter any difficulties, please check the FAQs on our website (faq.noctua.at) and don't hesitate to contact our support team at support@noctua.at.

Multilingual versions of this manual are available on our website: www.noctua.at/manuals

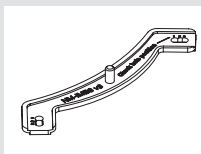
INTEL

LGA1851, LGA1700,
LGA1200 & LGA115x

Required mounting parts:



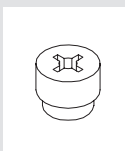
1x NM-IBP4
backplate



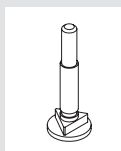
2x NM-IMB3
mounting bars



4x NM-ICS1
clip-on spacers



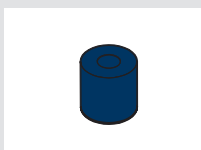
4x NM-ITS1
thumb screws



4x NM-IBT5
bolts



4x NM-IPS1
black plastic spacers for
LGA1200/115x



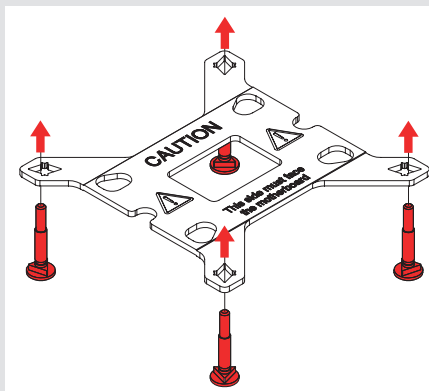
4x NM-IPS3
blue plastic spacers for
LGA1851/1700

1 Removing the motherboard

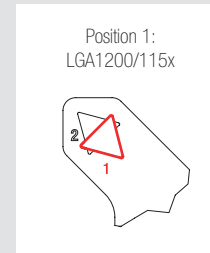
If you would like to use the cooler on an assembled system and your case does not have a cut-out at the rear side of the motherboard tray, you must first remove the motherboard from the case in order to be able to install the supplied backplate.

2 Setting up the backplate

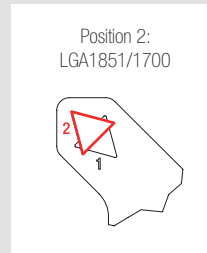
First, identify the side of the backplate that should face the motherboard (marked with caution signs). Then choose the appropriate hole spacing for your socket and insert the four bolts into the backplate from the opposite side (marked with model name, SecuFirm2™ branding and numbers for hole spacing) at the appropriate position.



Use hole position 1 for LGA1200/LGA115x (LGA1150, LGA1151, LGA1155, LGA1156) and hole position 2 for LGA1851/LGA1700:

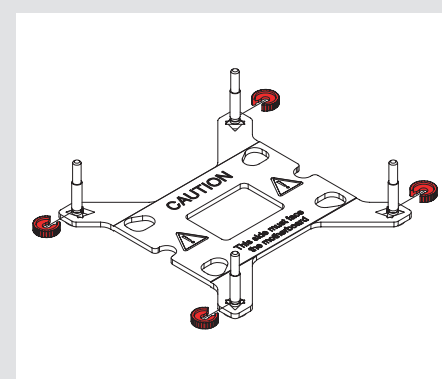


Position 1:
LGA1200/115x

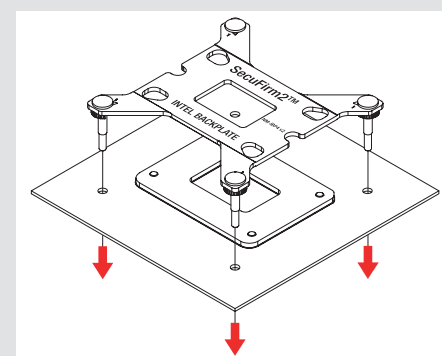


Position 2:
LGA1851/1700

Fix the bolts using the NM-ICS1 clip-on spacers.



3 Attaching the backplate



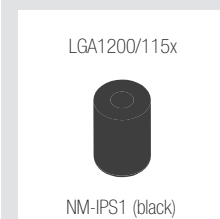
Caution: The supplied backplate will install over the motherboard's stock backplate, so the motherboard's stock backplate must not be taken off.

Place the backplate on the rear side of the motherboard so that the bolts protrude through the mounting holes.

4 Installing the mounting bars

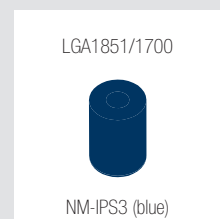
Please first choose the correct set of plastic spacers and the correct set of holes on the mounting bars according to whether you are using an LGA1200/LGA115x (LGA1150, LGA1151, LGA1155, LGA1156) or an LGA1851/LGA1700 socket motherboard.

Use the black NM-IPS1 plastic spacers for LGA1200/LGA115x (LGA1150, LGA1151, LGA1155, LGA1156) and the blue NM-IPS3 spacers for LGA1851/LGA1700.



LGA1200/115x

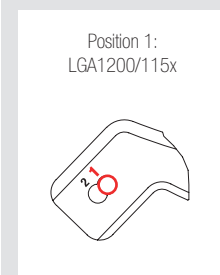
NM-IPS1 (black)



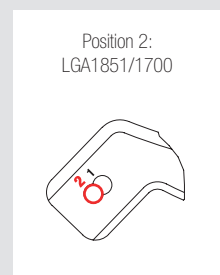
LGA1851/1700

NM-IPS3 (blue)

Use hole position 1 for LGA1200/LGA115x (LGA1150, LGA1151, LGA1155, LGA1156) and hole position 2 for LGA1851/LGA1700:

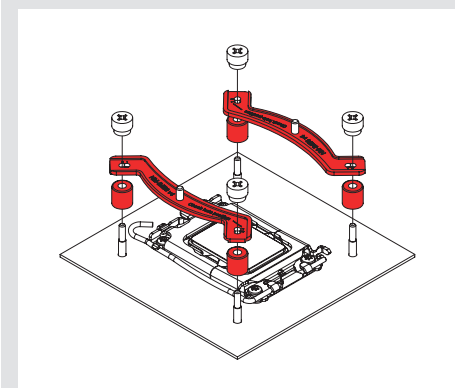


Position 1:
LGA1200/115x

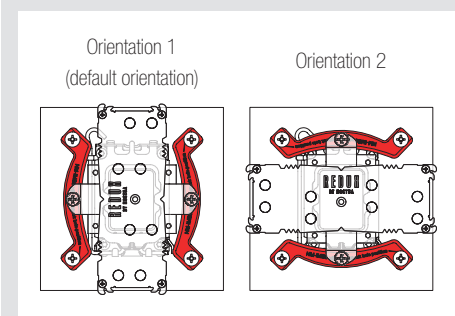


Position 2:
LGA1851/1700

Put the plastic spacers onto the bolts of the backplate, then add the mounting bars.



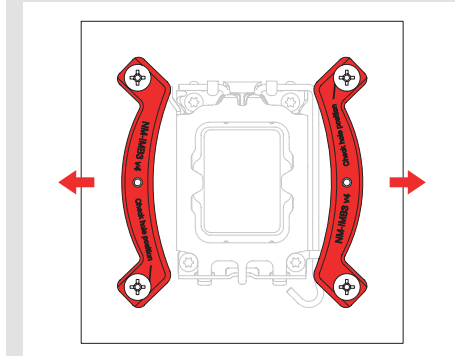
Caution: Choose the alignment of the mounting bars according to the desired final orientation of the cooler.



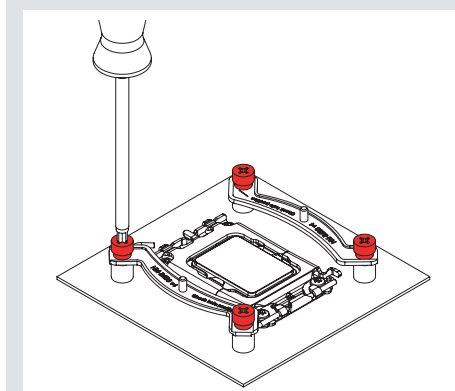
Orientation 1
(default orientation)

Orientation 2

Caution: Make sure that the curved sides of the mounting bars are pointing outwards.



Fix the mounting bars using the four NM-ITS1 thumb screws.

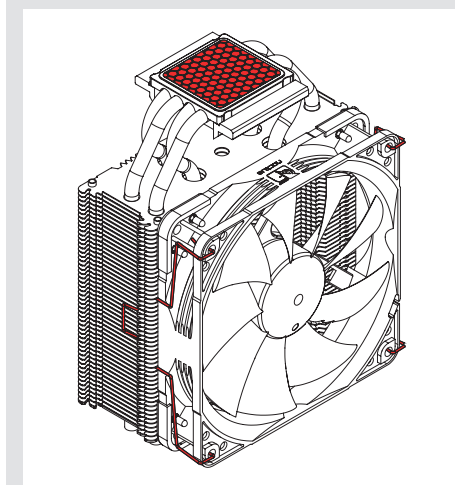


Caution: Gently tighten the screws until they stop, but do not use excessive force (max. torque 0.6 Nm).

5 Fastening the heatsink to the CPU

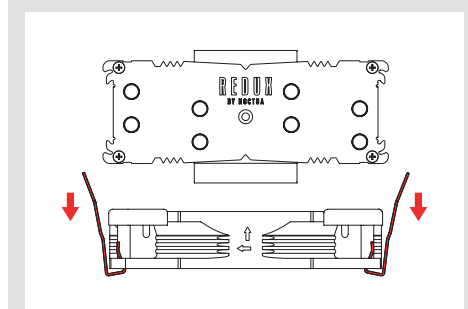
If there are residual traces of thermal paste or thermal pads on your CPU from previous usage, please clean them off first.

The cooler comes with high quality Noctua NT-H1 thermal paste pre-applied, so if you are installing it for the first time, there is no need to apply extra thermal paste.

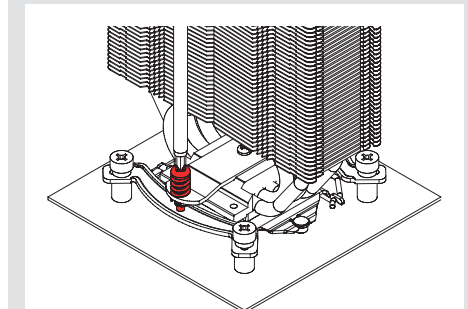


If you are not using the heatsink for the first time and it therefore no longer has a fresh layer of pre-applied thermal compound (e.g. Noctua NT-H1 or NT-H2, available separately) to the CPU before installing the heatsink. In this case, please remove residual traces of thermal paste or pads from both the CPU and the heatsink before applying new thermal compound.

Caution: Please first take off the fan as well as the protection cover at the bottom side of the heatsink.



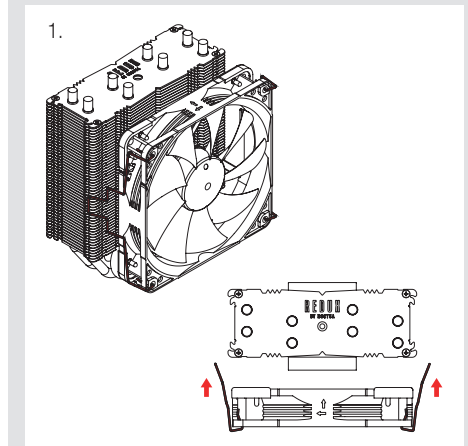
Then put the heatsink onto the CPU and screw it to the screw threads of the mounting bars. Perform 2-3 turns on each screw, then repeat until both are fully tightened.



Caution: Gently tighten the screws until they stop, but do not use excessive force (max. torque 0.6 Nm).

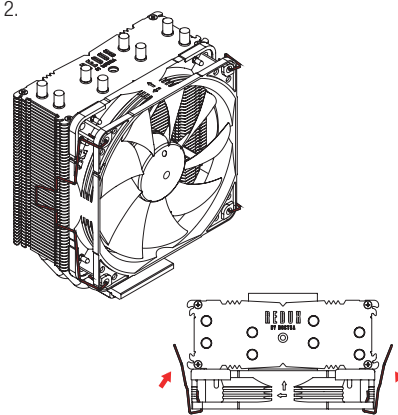
6 Fan setup

Reattach the fan to the heatsink using the supplied steel clips:

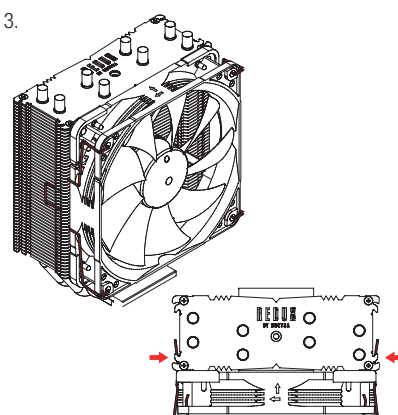




2.



3.



Connect the fan to the motherboard's CPU fan header. If you would like to further improve the cooling performance of your NH-U12S redux, the optional NA-FK1 second fan kit allows you to install a second NF-P12 redux-1700 PWM for even better efficiency.

! Transporting your system

As it is not possible to reliably calculate or control the forces that act upon a system during transport (e.g. in shipping), we generally recommend, for safety reasons, taking the fan off the heatsink in order to reduce the weight below 700g. Noctua cannot be held responsible for any damage that may arise due to excessive stress during transport if you keep the fan installed.

! Warranty, support and FAQs

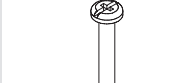
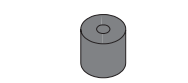
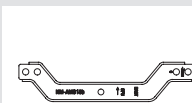
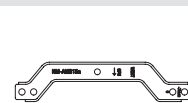
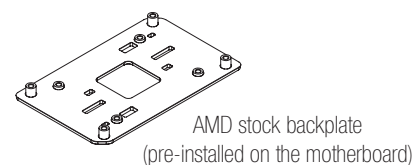
Even with high-grade products and strict quality control, the possibility of defects cannot be eliminated entirely. Therefore, we aim at providing the highest possible level of reliability and convenience by offering a warranty period of 6 years and direct, fast and straightforward RMA service.

Should you encounter any problems with your NH-U12S redux, please don't hesitate to contact our support team (support@noctua.at).

Please also consult the FAQ section on our website: [faq.noctua.at](https://www.noctua.at/faq)

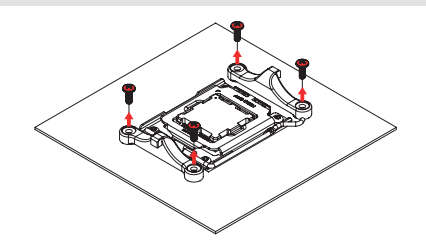
AMD AM5 & AM4

Required mounting parts:

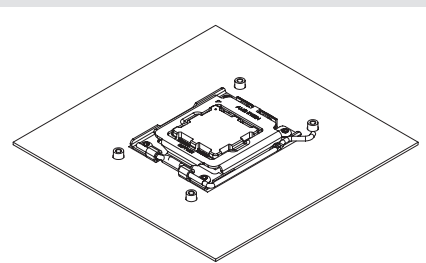


1 Removing the stock retention module – putting the backplate in place

The SecuFirm2™ mounting system will install directly to the motherboard's stock backplate, so please first remove the motherboard's stock CPU cooler retention module by unscrewing it from the backplate (if it has not already been removed for previous installations).

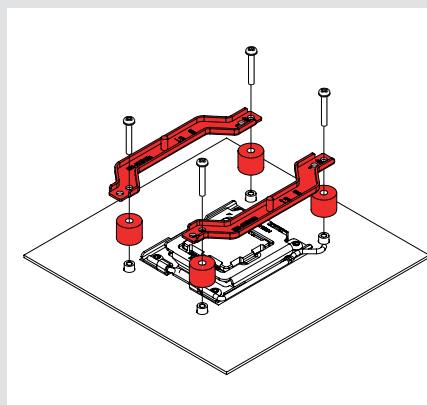


On AM4, the stock backplate will become loose when unscrewing the retention module, so hold it in place for the next step. If you have lost your stock AM4 backplate, please contact us at support@noctua.at. On AM5, the stock backplate is screw-fixed to the socket, so should simply remain in place.



2 Installing the mounting bars

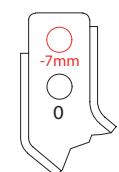
First put the plastic spacers onto the screw threads of the backplate. Then fix the NM-AMB15 mounting bars using the four NM-ALS1 long screws.



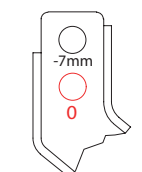
On AM5 and Ryzen 5000/3000 series AM4 CPUs, choose the -7mm offset hole position to ensure optimal contact quality and performance.

On other AM4 CPUs, or if there are any compatibility issues in the offset position (e.g. clearance with motherboard heatsinks), please choose the standard position (0).

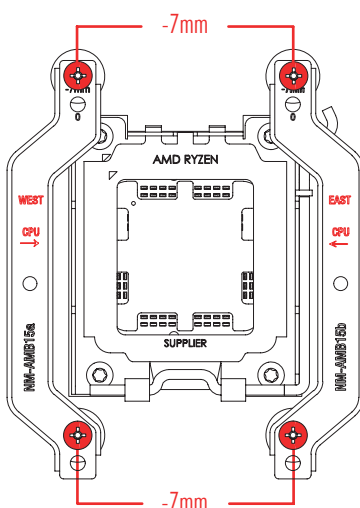
Offset position



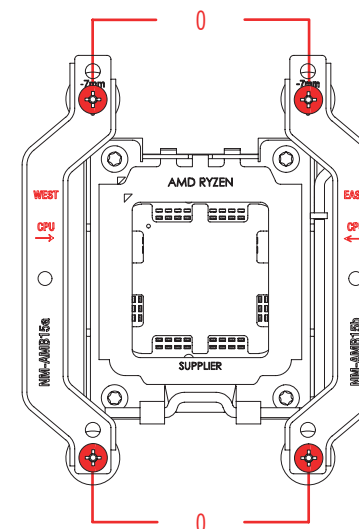
Standard position (no offset)



Offset position



Standard position (no offset)



Caution: Make sure that the "CPU →" markings point towards the CPU and that the NM-AMB15a bar with the "WEST" marking is installed on the west (left) side of the socket and the NM-AMB15b bar with the "EAST" marking is installed on the east (right) side of the socket, as shown above.

Gently tighten the screws until they stop, but do not use excessive force (max. torque 0.6 Nm).

3 Fastening the heatsink to the CPU

Please refer to step 5 of the Intel installation manual.

4 Fan setup

Please refer to step 6 of the Intel installation manual.

! Transporting your system

As it is not possible to reliably calculate or control the forces that act upon a system during transport (e.g. in shipping), we generally recommend, for safety reasons, taking the fan off the heatsink in order to reduce the weight below 700g. Noctua cannot be held responsible for any damage that may arise due to excessive stress during transport if you keep the fan installed.

! Warranty, support and FAQs

Even with high-grade products and strict quality control, the possibility of defects cannot be eliminated entirely. Therefore, we aim at providing the highest possible level of reliability and convenience by offering a warranty period of 6 years and direct, fast and straightforward RMA service.

Should you encounter any problems with your NH-U12S redux, please don't hesitate to contact our support team (support@noctua.at).

Please also consult the FAQ section on our website: [faq.noctua.at](https://www.noctua.at/faq)