



## ! LGA115x & LGA1200

Dear customer,

Congratulations on choosing the Noctua NH-P1.

The NH-P1 is Noctua's first passive CPU cooler and has been custom-designed for fanless operation from ground up: In enclosures with good natural convection, its six heatpipes and thick, widely spaced heatsink fins enable it to cool modern high-end CPUs with low to moderate heat dissipation completely passively. Please take a look at our setup guidelines in order to make sure that you will get optimal results.

Enjoy your NH-P1!

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 list on our website ([www.noctua.at/compatibility](http://www.noctua.at/compatibility)) 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 ([www.noctua.at/faqs](http://www.noctua.at/faqs)) and don't hesitate to contact our support team at [support@noctua.at](mailto:support@noctua.at).

Multilingual versions of this manual are available on our website: [www.noctua.at/manuals](http://www.noctua.at/manuals)

**Caution:** In order to get optimal results when building passively cooled systems using the NH-P1, it is important to follow some general guidelines.

Please refer to the following page for detailed guidelines and recommendations on how to set up your system for best results: <https://noctua.at/en/nh-p1-setup-guidelines>

The NH-P1 strictly requires either a fanless PC case with good natural convection, an open benchtable type setup or a PC case with fans in order to achieve its full performance.

We offer a list of recommended cases for completely fanless systems using the NH-P1: <https://ncc.noctua.at/s/nh-p1-case-recommendations>

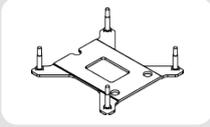
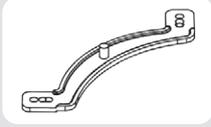
While the NH-P1 provides first-rate performance for a passive cooler, it is not suitable for overclocking or CPUs that create high heat-loads. Please note that the TDP (Thermal Design Power) rating or amount of heat dissipation that the cooler can handle not only depends on the chassis and various other factors such as ambient temperature or other components inside the system, but also generally varies from CPU model to CPU model.

For this reason, we specify cooling performance using the Noctua Standardised Performance Rating (NSPR) instead of giving a general TDP specification. In addition, we refer to our CPU compatibility list where we indicate how well the cooler can be expected to work on a particular CPU in a fully optimised setup (see our setup guidelines):

<https://ncc.noctua.at/s/nh-p1-cpus>

If necessary, Noctua recommends adding a near-inaudible 120mm fan like the NF-A12x25 LS-PWM to the heatsink for improved performance headroom.

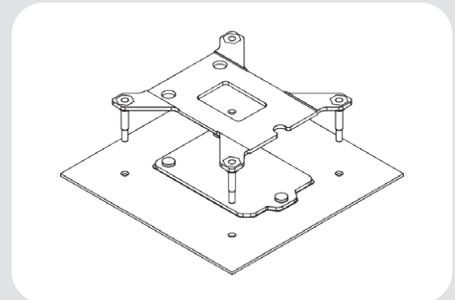
### Required mounting parts:

	
1x NM-1BP2 backplate	2x NM-1MB2 mounting bars
	
4x NM-1PS1 plastic spacers	4x NM-1TS1-TX thumb screws

## 1 Removing the motherboard

In case you want to use the cooler on an assembled system and your case doesn't have a cut-out at the rear side of the motherboard tray, you first have to remove the motherboard from the case in order to be able to install the supplied backplate.

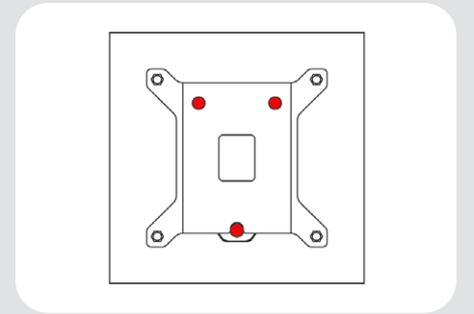
## 2 Attaching the backplate



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

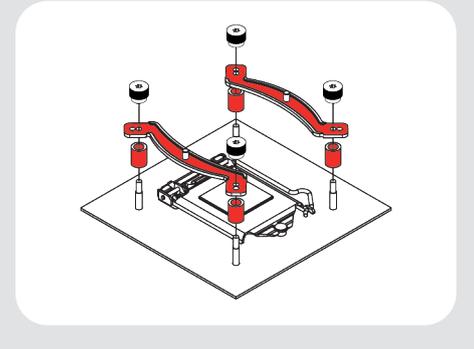
Place the backplate on the rear side of the motherboard so that the bolts stick through the mounting holes.

**Caution:** Please make sure that the three cut-outs in the supplied backplate align with the screws of the motherboard's stock backplate.

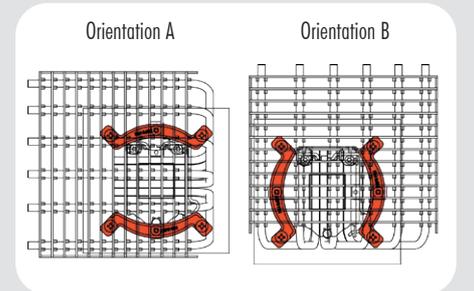


## 3 Installing the mounting bars

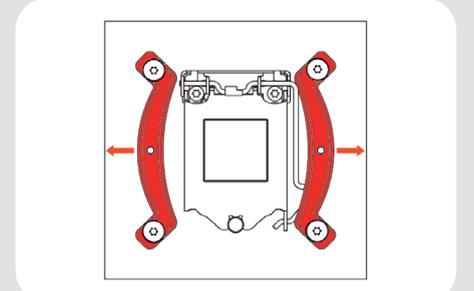
First put the plastic spacers onto the bolts of the backplate, then add the NM-1MB2 mounting bars.



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

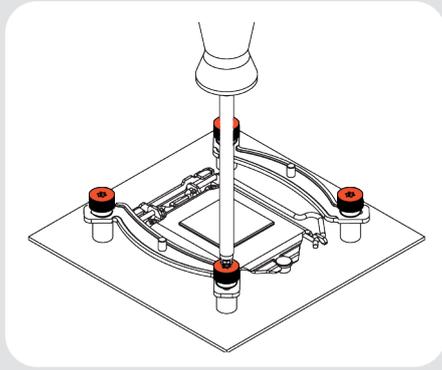


**Caution:** Make sure that the curved sides of the mounting bars are pointing outwards.





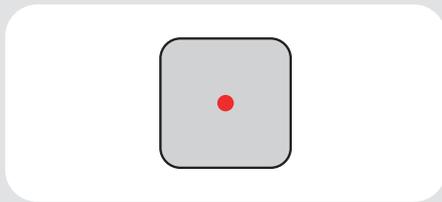
Fix the mounting bars using the 4 thumb screws.



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

## 4 Applying the thermal paste

If there are residual traces of thermal paste or thermal pads on your CPU, please clean them off first using the supplied NA-CW1 cleaning wipe. Then press a drop (3-4mm diameter) of NT-H2 onto the centre of the heat-spreader.



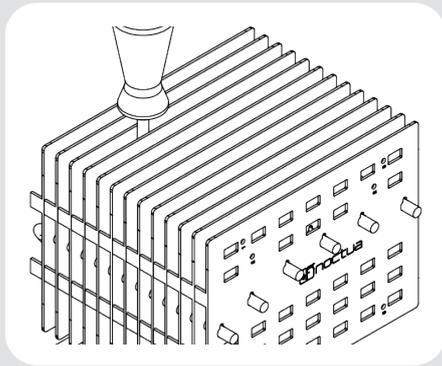
**Caution:** Applying too much thermal paste will lower heat conductivity and cooling performance!

## 5 Fastening the heatsink to the CPU

**Caution:** Please first take off 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.

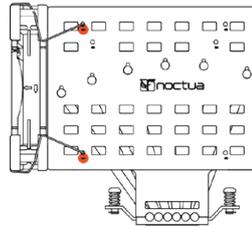


**Caution:** Gently tighten the screws until they stop, but do not use excessive force (max. torque 0.6 Nm).

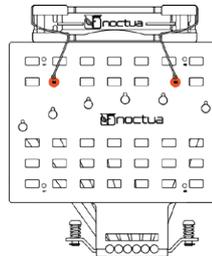
## 6 Fan setup

While the NH-P1 has been designed for passive operation, its cooling performance can be significantly improved by adding a near-silent low-speed fan such as the NF-A12x25 LS-PWM. In order to install the fan using the supplied fan mounting clips, please first decide on which side of the cooler you would like to install the fan and identify the correct hole set (1/2/3):

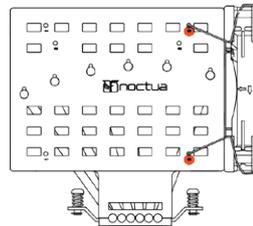
Hole set 1



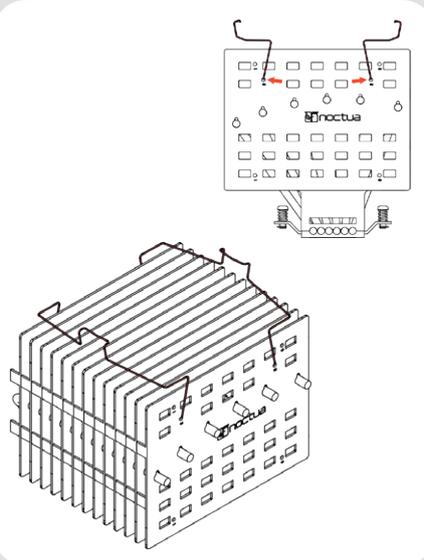
Hole set 2



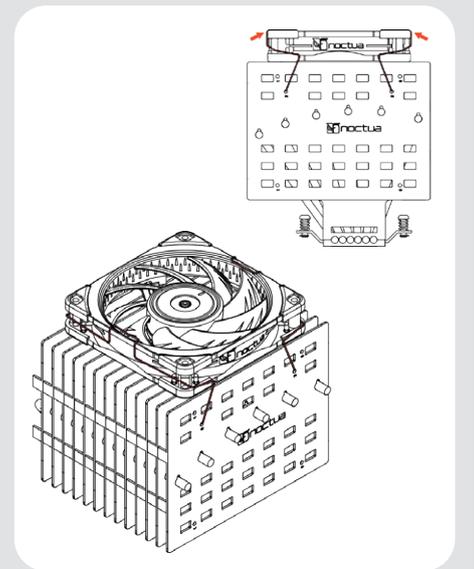
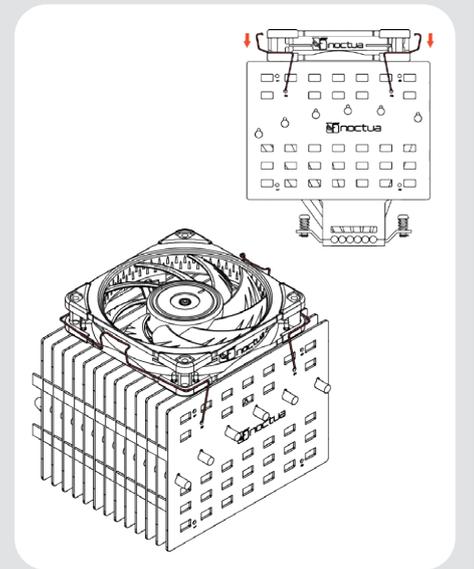
Hole set 3



Then insert the tips of the fan clips into the correct hole set.



Place the fan on the heatsink and pull the clips over the fan to hold it in place.



Connect the fan to one of the fan headers of your motherboard.

## ! 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-P1, please don't hesitate to contact our support team ([support@noctua.at](mailto:support@noctua.at)).

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



## ! LGA20xx

Dear customer,

Congratulations on choosing the Noctua NH-P1.

The NH-P1 is Noctua's first passive CPU cooler and has been custom-designed for fanless operation from ground up: In enclosures with good natural convection, its six heatpipes and thick, widely spaced heatsink fins enable it to cool modern high-end CPUs with low to moderate heat dissipation completely passively. Please take a look at our setup guidelines in order to make sure that you will get optimal results.

Enjoy your NH-P1!

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 list on our website ([www.noctua.at/compatibility](http://www.noctua.at/compatibility)) 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 ([www.noctua.at/faqs](http://www.noctua.at/faqs)) and don't hesitate to contact our support team at [support@noctua.at](mailto:support@noctua.at).

Multilingual versions of this manual are available on our website: [www.noctua.at/manuals](http://www.noctua.at/manuals)

**Caution:** In order to get optimal results when building passively cooled systems using the NH-P1, it is important to follow some general guidelines.

Please refer to the following page for detailed guidelines and recommendations on how to set up your system for best results: <https://noctua.at/en/nh-p1-setup-guidelines>

The NH-P1 strictly requires either a fanless PC case with good natural convection, an open benchtable type setup or a PC case with fans in order to achieve its full performance.

We offer a list of recommended cases for completely fanless systems using the NH-P1: <https://ncc.noctua.at/s/nh-p1-case-recommendations>

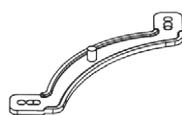
While the NH-P1 provides first-rate performance for a passive cooler, it is not suitable for overclocking or CPUs that create high heat-loads.

Please note that the TDP (Thermal Design Power) rating or amount of heat dissipation that the cooler can handle not only depends on the chassis and various other factors such as ambient temperature or other components inside the system, but also generally varies from CPU model to CPU model.

For this reason, we specify cooling performance using the Noctua Standardised Performance Rating (NSPR) instead of giving a general TDP specification. In addition, we refer to our CPU compatibility list where we indicate how well the cooler can be expected to work on a particular CPU in a fully optimised setup (see our setup guidelines): <https://ncc.noctua.at/s/nh-p1-cpus>

If necessary, Noctua recommends adding a near-inaudible 120mm fan like the NF-A12x25 LS-PWM to the heatsink for improved performance headroom.

### Required mounting parts:



2x NM-IMB2 mounting bars



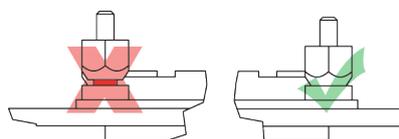
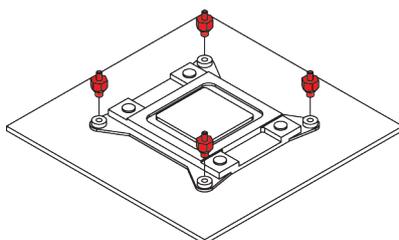
4x NM-IBT2 bolts



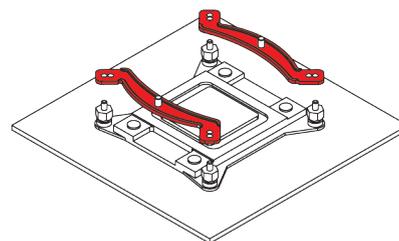
4x NM-ITS1-TX thumb screws

## 1 Installing the mounting bars

First screw the NM-IBT2 bolts into the screw threads of the LGA20xx socket frame.

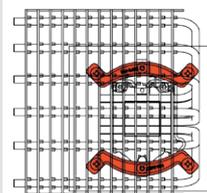


Then put the NM-IMB2 mounting bars onto the bolts.

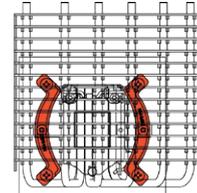


**Caution:** Choose the alignment of the mounting bars according to the desired final orientation of the cooler:

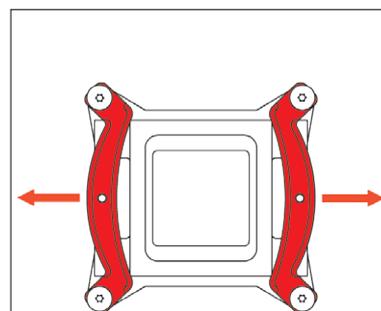
Orientation A



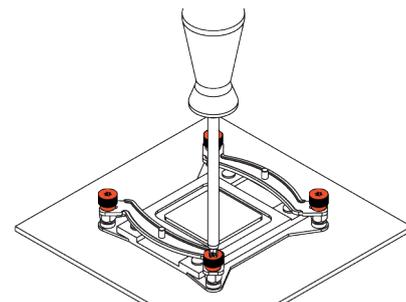
Orientation B



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



Fix the mounting bars using the 4 thumb screws.

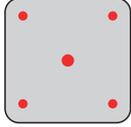


**Caution:** Gently tighten the thumb screws until they stop, but do not use excessive force (max. torque 0.6 Nm).



## 2 Applying the thermal paste

If there are residual traces of thermal paste or thermal pads on your CPU, please clean them off first using the supplied NA-CW1 cleaning wipe. Then press 4 small dots (~2mm diameter) near the corners plus 1 dot (~3-4mm diameter) of NT-H2 onto the centre of the heatspreader.

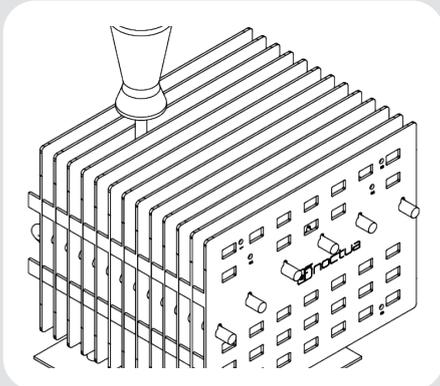


**Caution:** Applying too much thermal paste will lower heat conductivity and cooling performance!

## 3 Fastening the heatsink to the CPU

**Caution:** Please first take off 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.

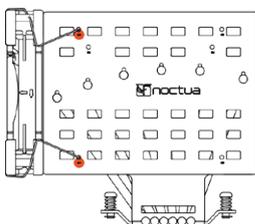


**Caution:** Gently tighten the screws until they stop, but do not use excessive force (max. torque 0.6 Nm).

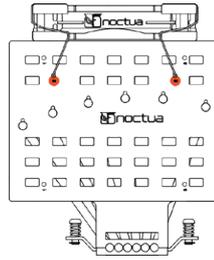
## 4 Fan setup

While the NH-P1 has been designed for passive operation, its cooling performance can be significantly improved by adding a near-silent low-speed fan such as the NF-A12x25 LS-PWM. In order to install the fan using the supplied fan mounting clips, please first decide on which side of the cooler you would like to install the fan and identify the correct hole set (1/2/3):

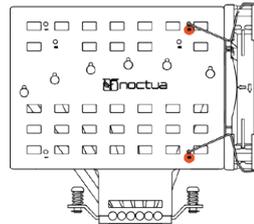
Hole set 1



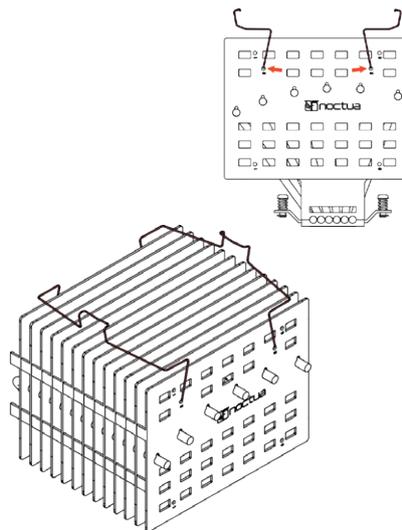
Hole set 2



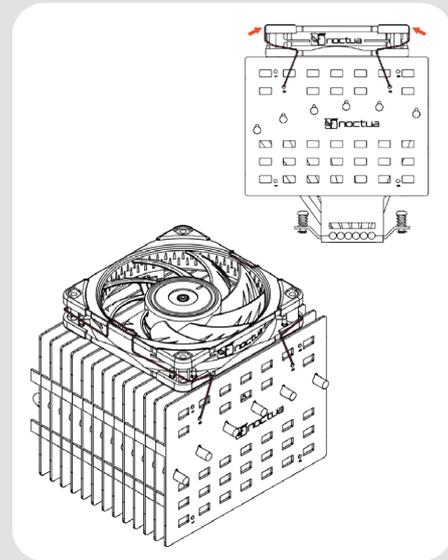
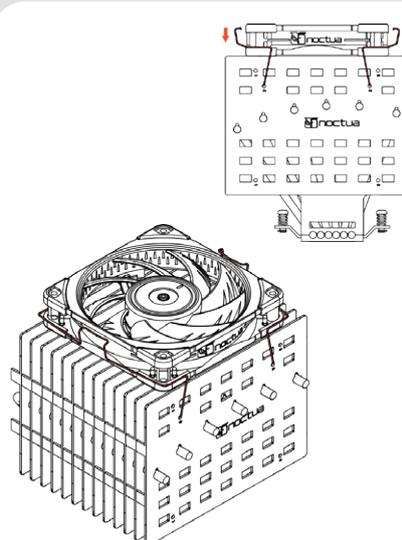
Hole set 3



Then insert the tips of the fan clips into the correct hole set.



Place the fan on the heatsink and pull the clips over the fan to hold it in place.



Connect the fan to one of the fan headers of your motherboard.

## ! 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-P1, please don't hesitate to contact our support team ([support@noctua.at](mailto:support@noctua.at)).

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



## ! AMD

Dear customer,

Congratulations on choosing the Noctua NH-P1.

The NH-P1 is Noctua's first passive CPU cooler and has been custom-designed for fanless operation from ground up: In enclosures with good natural convection, its six heatpipes and thick, widely spaced heatsink fins enable it to cool modern high-end CPUs with low to moderate heat dissipation completely passively. Please take a look at our setup guidelines in order to make sure that you will get optimal results.

Enjoy your NH-P1!

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 list on our website ([www.noctua.at/compatibility](http://www.noctua.at/compatibility)) 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 ([www.noctua.at/faqs](http://www.noctua.at/faqs)) and don't hesitate to contact our support team at [support@noctua.at](mailto:support@noctua.at).

Multilingual versions of this manual are available on our website: [www.noctua.at/manuals](http://www.noctua.at/manuals)

**Caution:** In order to get optimal results when building passively cooled systems using the NH-P1, it is important to follow some general guidelines.

Please refer to the following page for detailed guidelines and recommendations on how to set up your system for best results: <https://noctua.at/en/nh-p1-setup-guidelines>

The NH-P1 strictly requires either a fanless PC case with good natural convection, an open benchtable type setup or a PC case with fans in order to achieve its full performance.

We offer a list of recommended cases for completely fanless systems using the NH-P1: <https://ncc.noctua.at/s/nh-p1-case-recommendations>

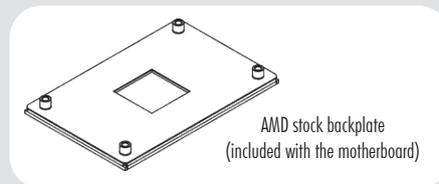
While the NH-P1 provides first-rate performance for a passive cooler, it is not suitable for overclocking or CPUs that create high heat loads. Please note that the TDP (Thermal Design Power) rating or amount of heat dissipation that the cooler can handle not only depends on the chassis and various other factors such as ambient temperature or other components inside the system, but also generally varies from CPU model to CPU model.

For this reason, we specify cooling performance using the Noctua Standardised Performance Rating (NSPR) instead of giving a general TDP specification. In addition, we refer to our CPU compatibility list where we indicate how well the cooler can be expected to work on a particular CPU in a fully optimised setup (see our setup guidelines):

<https://ncc.noctua.at/s/nh-p1-cpus>

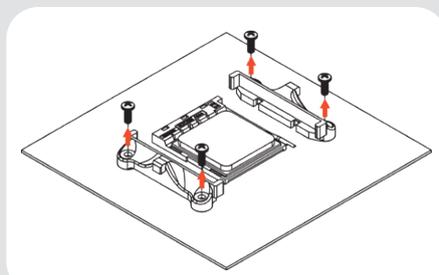
If necessary, Noctua recommends adding a near-inaudible 120mm fan like the NF-A12x25 LS-PWM to the heatsink for improved performance headroom.

### Required mounting parts:

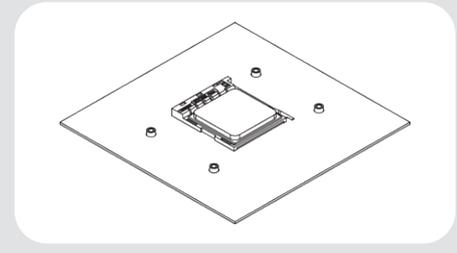


## 1 Removing the stock retention module – Putting the backplate in place

If your motherboard comes with a pre-installed CPU cooler retention module, please first remove it by unscrewing it from the backplate. The SecuFirm2+™ mounting system will install directly to the stock backplate, so please keep it in place.

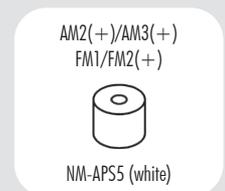


If your motherboard does not come with a pre-installed CPU cooler retention module, the AMD stock backplate should be included with the motherboard accessories. Please put the backplate on the rear side of the motherboard so that the screw threads of the backplate stick through the mounting holes of the motherboard as shown below. If your motherboard does not include a stock backplate, please contact Noctua customer support at [support@noctua.at](mailto:support@noctua.at).



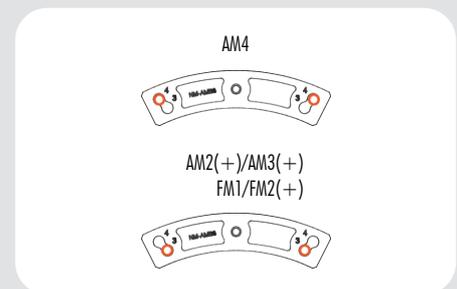
## 2 Attaching the mounting bars

Please first choose the correct set of plastic spacers and the correct set of holes on the mounting bars depending on whether you are using a socket AM4 or a socket AM2(+)/AM3(+)/FM1/FM2(+) motherboard:

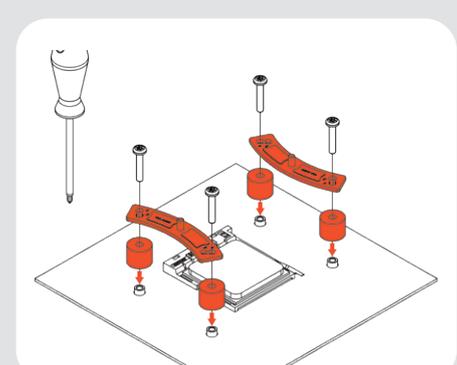


Use the grey NM-APS4 plastic spacers for AM4 and the white NM-APS5 plastic spacers for AM2(+)/AM3(+)/FM1/FM2(+).

Use the set of holes marked with "4" for AM4 and the set of holes marked with "3" for AM2(+)/AM3(+)/FM1/FM2(+).

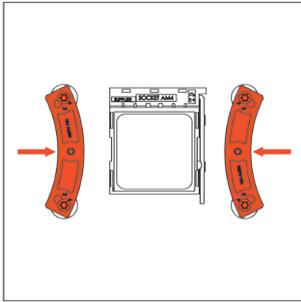


First put the plastic spacers onto the screw threads of the backplate, then fix the mounting bars using the four long screws.



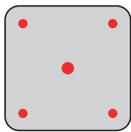


Make sure that the curved sides of the mounting bars are pointing inwards.



### 3 Applying the thermal paste

If there are residual traces of thermal paste or thermal pads on your CPU, please clean them off first using the supplied NA-CW1 cleaning wipe. Then press 4 small dots (~2mm diameter) near the corners plus 1 dot (~3-4mm diameter) of NT-H2 onto the centre of the heatspreader.



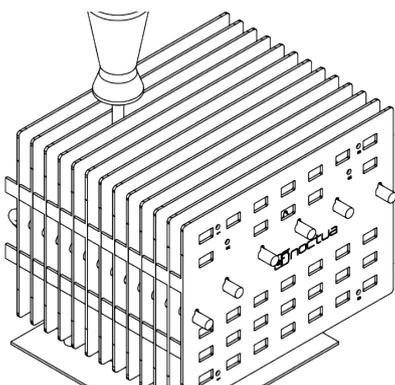
**Caution:** Applying too much thermal paste will lower heat conductivity and cooling performance!

### 4 Fastening the heatsink to the CPU

**Caution:** Please first take off 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.

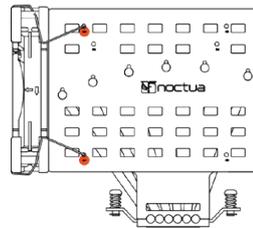


**Caution:** Gently tighten the screws until they stop, but do not use excessive force (max. torque 0.6 Nm).

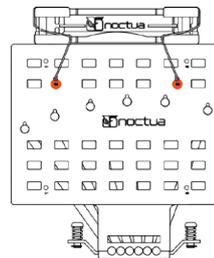
### 5 Fan setup

While the NH-P1 has been designed for passive operation, its cooling performance can be significantly improved by adding a near-silent low-speed fan such as the NF-A12x25 LS-PWM. In order to install the fan using the supplied fan mounting clips, please first decide on which side of the cooler you would like to install the fan and identify the correct hole set (1/2/3):

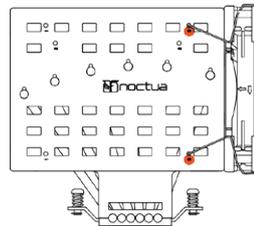
Hole set 1



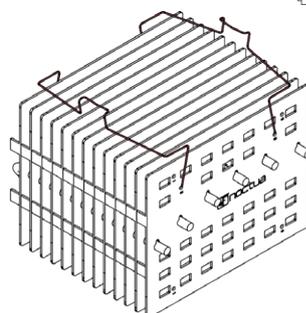
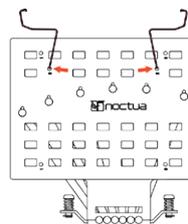
Hole set 2



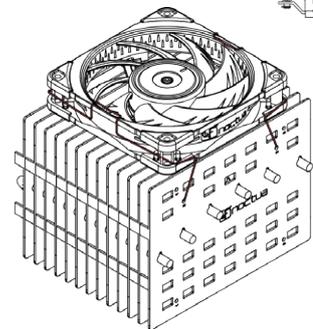
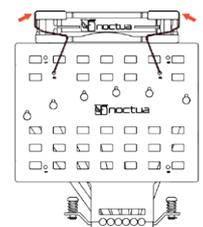
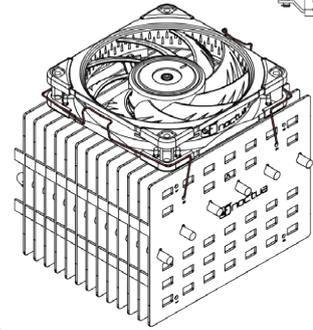
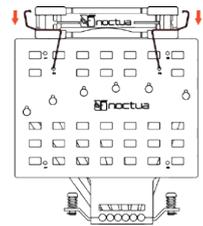
Hole set 3



Then insert the tips of the fan clips into the correct hole set.



Place the fan on the heatsink and pull the clips over the fan to hold it in place.



Connect the fan to one of the fan headers of your motherboard.

### ! 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-P1, please don't hesitate to contact our support team ([support@noctua.at](mailto:support@noctua.at)).

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