



Indigo Xtreme™ Application Note for EK-Supreme™ Series CPU Water Blocks

This product is intended for installation only by expert users. Improper installation may result in damage to your equipment. Enerdyne Solutions assumes no liability whatsoever, expressed or implied, for the use of these products, nor their installation. The following instructions are subject to change without notice. Please visit our web site at www.indigo-xtreme.com for the latest installation guides and application notes. Indigo Xtreme is a trademark of Enerdyne Solutions. EK-Supremacy is a trademark of EKWB d.o.o.

QUICK OVERVIEW

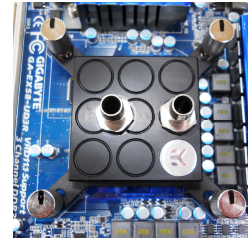
The following application note includes supplementary instructions to be used in conjunction with the Indigo Xtreme installation manual.



Read entire instructions before using Indigo Xtreme. Computer operating system and temperature monitoring utilities must be installed prior to use. Prior to installing Indigo Xtreme, complete the water block assembly (thru Step 4) as illustrated in the EK-Supreme installation manual.

WITHIN Step 2.11: HEAT SINK/BLOCK MOUNTING:

1. Locate the recommended thumb nut revolutions (see the table) for your specific socket type.
2. While holding the water block in a level/horizontal position, place the springs onto each thumb screw.
3. Place thumb nuts on each screw and turn just enough to engage the threads.
4. Temporarily mark each thumb nut with a marking pen or tape to indicate the starting position (see the black markings illustrated on the top of each thumb nut in the image).
5. Turn all thumb nuts the full recommended revolutions, beginning with the upper left and right thumb nuts (as illustrated in the image).
6. Proceed to ETI Reflow Procedure (within the installation guide and illustrated below).



CPU Socket	775/115x/AM3	1366/2011
Revolutions	5	6



Be certain thumb nuts have been tightened only the recommended revolutions; DO NOT bottom out; excessive clamping force may damage ETI, resulting in alloy leakage and/or poor thermal performance.

WITHIN STEP 3: ETI REFLOW PROCEDURE:

1. Connect up all coolant lines to the water block.
2. Orient the computer such that the motherboard and CPU are in a horizontal position.
3. Turn on the coolant pump.
4. Boot the computer. Clock frequency and voltage must be set to default (stock).
5. Use a CPU temperature monitoring program (such as SpeedFan™) and select the graphing option to track the profile of all core temperatures during reflow. Be certain the graph is open with all core temperatures selected before proceeding to the next step.
6. Exercise the CPU with a "burn" program (such as Prime 95™) to generate adequate heat for reflow. Multi-core CPUs require one open copy of the burn program for each core.
7. With the computer running, turn off the liquid pump.
8. Follow the average core temperature profile (with SpeedFan) illustrated in the graphs and table below; peak temperatures will vary depending on CPU type, coolant & ambient temperatures, etc.

#	All Supreme Water Blocks
1	All burn programs have been activated.
2	Core temperatures will immediately rise to peak of ~85-95°C.
3	Core temps. will slowly descend with coolant pump off.
4	All core temperatures will drop to a Bottoming Point.
5	Following the Bottoming Point, average core temps. will slowly rise again. Allow core temperatures to return to ~85-90°C.
6	Once the average core temperature has reached ~85-90°C, deactivate all burn programs and shut down computer; allow PC to cool for at least 20 minutes before booting and plugging in pump.

