



HYDRALOGIX 200 driver package

Release Notes

Version 1.7.106

For Windows Vista 32 & 64 -bit

Windows 7 32 & 64 -bit



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INTRODUCTION

This release notes document describes HYDRALOGIX 200 driver version 1.7.106 for Microsoft Windows Vista & Windows 7. The document describes added features, performance improvements, bug fixes and known bugs in this driver version.

HYDRALOGIX 200 RELEASE UPDATES

This chapter describes new features, performance improvements and pending issues for version 1.7.106. In addition there is a detailed description of resolved and open issues for this version.

Changes in version

The following sections list the changes made and issues resolved since driver version 1.7.105

What is new:

- NVIDIA latest drivers issue fixed

Open and known issues in this driver version

The following are the open issues with current driver release:

- Unigine Heaven 2.1 DX11 can take long time to exit
- No support for windowed mode
- It is recommended to connect the display to the stronger GPU
- Running benchmarks while FRAPS application is active may cause crashes (occurs also when HYDRALOGIX driver is disabled)
- 3xGPUs mode performs best with 3 identical GPUs
- Random white screens between the CPU tests in 3DMark Vantage

Test Report

Supported Games

Below games has passed Lucid validation and provide measurable performance gain over single GPU when applied with recommended GPU combinations.

1. 3DMark 11
2. 3DMarkVantage
3. 3DMark 06
4. Aliens vs Predators
5. Aliens vs Predators benchmark
6. Batman: Arkham Asylum
7. Burnout Paradise ultimate
8. Call of Juarez
9. Company of Heroes
10. Cryostasis
11. Crysis Warhead
12. Devil May Cry 4
13. Devil May Cry 4 Benchmark
14. Fallout 3
15. Far Cry 2
16. Fear 2
17. Hawx
18. Call of Duty: Black Ops
19. Call of Duty: Modern Warfare – Single Player
20. Call of Duty: Modern Warfare – Multi Player
21. Call of Duty: Modern Warfare 2 - Single Player
22. Call of Duty: Modern Warfare 2 - Multi Player
23. Jericho
24. Left 4 Dead
25. Left 4 Dead 2
26. Mini Ninjas
27. Operation Flashpoint Dragon Rising
28. Prince of Persia: The Forgotten Sands
29. Resident Evil 5 Japanese (Biohazard)
30. Resident Evil 5
31. Stone Giant
32. Stormrise
33. Supreme Commander

- 34. Supreme Commander 2
- 35. The Witcher - enhanced
- 36. Tomb Rider
- 37. Trackmania Forever
- 38. Trackmania Nations
- 39. Velvet Assassin
- 40. Unigine Heaven 2.1
- 41. Wanted Weapons of Fate
- 42. World in Conflict
- 43. Wolfschanze 2

Performance Reference

Performance measurements below provided for reference only. The actual performance may differ from system to system depending on CPU speed, memory size, etc.

Intel Platform High-end

- GPUs: Nvidia GTX580, Nvidia GTX480, ATI HD6870
- CPU: Intel i7 870

Game	Mode	% Over Single
3DMark 11 DX11 Extreme Preset	N-Mode580	170%
	A-Mode 6870	177%
	X-Mode 480/6870	159%
3DMark06 DX9 19x12 AAx8 AFx16	N-Mode580	115%
	A-Mode 6870	139%
	X-Mode 480/6870	119%
3DMark Vantage DX10 Extreme Preset	N-Mode580	173%
	A-Mode 6870	186%
	X-Mode 480/6870	152%
Heaven Benchmark 2.1: Unigine DX11 19x12 AAx8 Extreme Tessellation	N-Mode580	177%
	A-Mode 6870	158%
	X-Mode 480/6870	105%
Resident Evil 5 DX10 19x12 AAx8	N-Mode580	191%
	A-Mode 6870	130%
	X-Mode 480/6870	109%
Aliens vs. Predator DX11 19x12 AAx4	N-Mode580	165%
	A-Mode 6870	170%
	X-Mode 480/6870	122%
Devil May Cry 4 DX10 19x12 MAX AA	N-Mode580	124%
	A-Mode 6870	172%
	X-Mode 480/6870	138%
Street Fighter IV DX9 19x12 MAX AA	N-Mode580	101%
	A-Mode 6870	101%
	X-Mode 480/6870	142%
Call of Duty: MW2 DX9 19x12 MAX AA	N-Mode580	132%
	A-Mode 6870	101%
	X-Mode 480/6870	101%

Batman: Arkham Asylum DX9 19x12 MAX AA PSX OFF	N-Mode580	122%
	A-Mode 6870	119%
	X-Mode 480/6870	101%

Intel Platform Mid-Range

- GPUs: Nvidia GTX460
- CPU: Intel i7 870

Game	MODE	% Over Single
3DMark06 DX9 AAx8, Afx16	N-Mode 460	154%
3DMark Vantage DX10 Extreme	N-Mode 460	186%
Unigine Heaven 2.1 DX11 AAx8 Extreme Tessellation	N-Mode 460	176%
Resident Evil 5 DX10 AAx8	N-Mode 460	125%
Aliens vs. Predator DX11 AAx4	N-Mode 460	182%
Metro 2033 DX11 AAx4	N-Mode 460	171%
Devil may cry 4	N-Mode 460	157%
Street Fighter IV DX9 AAx8	N-Mode 460	106%
H.A.W.X DX10 AAx8	N-Mode 460	123%
Call of Duty: MW2 DX9 AAx4	N-Mode 460	175%
Medal of Honor	N-Mode 460	139%
Mafia 2	N-Mode 460	132%

AMD Platform Mid-Range

- GPUs: Nvidia GTX460 and ATI HD5770
- CPU: AMD Phenom™ II X6

Game	MODE	% Over Single
3DMark06 DX9 AAX8, Afx16	X-Mode 460/5770	141%
	N-Mode 460	146%
	A-Mode 5770	167%
3DMark Vantage DX10 Extreme	X-Mode 460/5770	147%
	N-Mode 460	186%
	A-Mode 5770	181%
Unigine Heaven 2.1 DX11 AAX8 Extreme Tessellation	X-Mode 460/5770	130%
	N-Mode 460	168%
	A-Mode 5770	179%
Star Craft 2 DX9	X-Mode 460/5770	101%
	N-Mode 460	101%
	A-Mode 5770	137%
Resident Evil 5 DX10 AAX8	X-Mode 460/5770	106%
	N-Mode 460	102%
	A-Mode 5770	131%
Aliens vs. Predator DX11 AAX4	X-Mode 460/5770	123%
	N-Mode 460	183%
	A-Mode 5770	169%
Metro 2033 DX11 AAX4	X-Mode 460/5770	118%
	N-Mode 460	173%
	A-Mode 5770	146%
Street Fighter IV DX9 AAX8	X-Mode 460/5770	101%
	N-Mode 460	101%
	A-Mode 5770	164%
H.A.W.X DX10 AAX8	X-Mode 460/5770	101%
	N-Mode 460	137%
	A-Mode 5770	120%
Call of Duty: MW2 DX9 AAX4	X-Mode 460/5770	138%
	N-Mode 460	167%
	A-Mode 5770	123%
Batman: Arkham Asylum DX9 No AA, No Physx	X-Mode 460/5770	101%
	N-Mode 460	132%
	A-Mode 5770	101%

AMD Platform High-End

- GPUs: Nvidia GTX480 and ATI HD5870
- CPU: AMD Phenom™ II X6

Game	MODE	% Over Single
3DMark06 DX9 AAX8, Afx16	N-Mode 480	117%
	A-Mode 5870	124%
3DMark Vantage DX10 Extreme	N-Mode 480	176%
	A-Mode 5870	168%
Unigine Heaven 2.1 DX11 AAX8 Extreme Tessellation	N-Mode 480	178%
	A-Mode 5870	169%
Aliens vs. Predator DX11 AAX4	N-Mode 480	182%
	A-Mode 5870	161%
Metro 2033 DX11 AAX4	N-Mode 480	164%
	A-Mode 5870	226%
Devil may cry 4	N-Mode 480	130%
	A-Mode 5870	136%
Call of Duty: MW2 DX9 AAX4	N-Mode 480	101%
	A-Mode 5870	106%

- GPUs: Nvidia GTX580
- CPU: AMD Phenom™ II X6

Game	MODE	% Over Single
3DMark06 DX9 AAX8, Afx16	N-Mode 580	112%
3DMark Vantage DX10 Extreme	N-Mode 580	158%
Aliens vs. Predator DX11 AAX4	N-Mode 580	174%
Unigine Heaven 2.1 DX11 AAX8 Extreme Tessellation	N-Mode 580	123%

Supported Operating Systems

The HYDRALOGIX 200 Release supports:

- Microsoft Windows® Vista (SP2) 32-bit and 64-bit
- Microsoft Windows® 7 OS 32-bit and 64-bit

Microsoft Windows® Editions include:

- Windows Vista Home Basic
- Windows Vista Home Premium
- Windows Vista Business
- Windows Vista Enterprise Edition
- Windows Vista Ultimate
- Windows 7 Home Premium
- Windows 7 Professional
- Windows 7 Ultimate

The HYDRALOGIX 200 driver supports the following languages in the main driver Control Panel:

English (USA)

Supported graphic libraries

The HYDRALOGIX 200 driver supports the following graphic libraries:

- DirectX 9
- DirectX 10/10.1
- DirectX 11

Supported graphics cards and display drivers

The HYDRALOGIX 200 driver supports the following graphics cards and drivers:

N-Mode

- Graphics cards GF 9xxx/2xx/4xx/5xx series (except GTX295 and GTX 590)
- NVIDIA display drivers: All WHQL drivers

A-Mode

- Graphics cards HD4xxx/HD5xxx/HD6xxx series (except HD 5970 and HD6990)
- ATI/AMD display drivers: All WHQL drivers

X-Mode

- Graphics cards
 - Nvidia cards GF 9xxx/2xx/4xx/5xx series (except GTX295 and GTX 590)
 - AMD/ATi HD4xxx/HD5xxx/HD6xxx series (except HD 5970 and HD6990)
- Display drivers:
 - Nvidia: All WHQL drivers
 - AMD/ATi: All WHQL drivers

Installation

Minimum Hard Disk Space

The hard disk space requirements are a minimum of 15 MB for English-only, and 20 MB for International.

Before You Begin

Please uninstall your older driver version before installing 1.7.106 (happens automatically)

Please refer to <http://www.lucidlogix.com/driverdownloads.html> to download the latest available HydraLogix drivers.

Installation Instructions

1. Run the HYDRALOGIX 200 install file to launch the Installation Wizard.
2. Follow the instructions in the Installation Wizard to complete the installation.
3. Click Finish.
4. **Restart the computer**

General Tips

- In all Modes - higher settings result with better performance
 - Turn AA ON
 - Resolution 1920 x1200 or higher is recommended
 - High game settings
- In non-identical A & N modes and in X mode
 - Different graphics card manufacturers – ok (e.g. MSI + Other vendor)
 - Different graphics card memory size and type – ok (e.g. 512MB + 1.76Gb)
 - Overclock and non-overclock graphics cards - ok
 - Multi GPU performance ratio should be between 1:1 and 1:2 – see suggested combinations in Appendix A below
 - It is recommended to connect the display to the stronger GPU

Common mistakes

- Not using latest HYDRALOGIX driver
- Trying to run non-qualified graphics card combinations
- Running non-qualified games

Remark: When a non qualified graphics card combination or game is running – the game will default to the GPU connected to the screen, ensuring the quality of service

Appendix A: Suggested GPU combinations

AMD GPUs

	A695X A6900	A68XX A6800	A58XX A5900	A57XX A5700	A56XX A5600	A54XX A53XX	A48XX A47XX	A46XX A45XX
A697X A695X A6900	1	1	0	0	0	0	0	0
A68XX	1	1	1	0	0	0	0	0
A58XX A5900	0	1	1	1	0	0	0	0
A57XX	0	0	1	1	0	0	1	0
A56XX	0	0	0	0	1	1	0	1
A55XX A54XX A53XX	0	0	0	0	1	1	0	1
A48XX A47XX	0	0	0	1	0	0	1	0
A46XX A45XX	0	0	0	0	1	1	0	1

AMD + NVIDIA GPUs

	N580 N570	N560 N550	N480 N470	N46X N460	N450 N450	N430 N430	N28X N27X	N26X N250	N240 N240	N220 N210	N98XX N98XX	N96XX N95XX
N580 N570	1	0	0	0	0	0	0	0	0	0	0	0
N560 N550	1	1	0	0	0	0	0	0	0	0	0	0
N480 N470	1	1	1	1	0	0	1	1	0	0	0	0
N46X N460	0	1	1	1	1	0	1	1	0	0	0	0
N450 N450	0	0	0	0	0	1	0	0	1	0	0	0
N430 N430	0	0	0	0	0	1	0	0	1	1	0	0
N28X N27X	0	0	1	1	1	0	1	1	0	0	1	0
N26X N250	0	0	1	1	1	0	1	1	0	0	1	0
N240 N240	0	0	0	0	0	0	0	0	1	0	0	1
N220 N210	0	0	0	0	0	0	0	0	0	1	0	1
N98XX N98XX	0	0	0	1	1	0	1	1	0	0	1	1
N96XX N95XX	0	0	0	0	0	1	0	0	1	1	1	1

NVIDIA GPUs

	N580 N570	N560 N550	N480 N470	N46X N460	N450 N450	N430 N430	N28X N27X	N26X N250	N240 N240	N220 N210	N98XX N98XX	N96XX N95XX
N580 N570	1	1	1	0	0	0	0	0	0	0	0	0
N560 N550	1	1	1	1	0	0	1	0	0	0	0	0
N480 N470	1	1	1	1	0	0	1	1	0	0	0	0
N46X N460	0	1	1	1	1	0	1	1	0	0	1	0
N450 N450	0	0	0	1	1	0	1	1	0	0	1	0
N430 N430	0	0	0	0	0	1	0	0	0	0	0	1
N28X N27X	0	1	1	1	1	0	1	1	0	0	1	0
N26X N250	0	0	1	1	1	0	1	1	0	0	1	0
N240 N240	0	0	0	0	0	0	0	0	1	0	0	1
N220 N210	0	0	0	0	0	0	0	0	0	1	0	1
N98XX N98XX	0	0	0	1	1	0	1	1	0	0	1	1
N96XX N95XX	0	0	0	0	0	1	0	0	1	1	1	1