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Home > Android TV

NVIDIA SHIELD Android TV OTA Update Improves HTPC Credentials

17 Comments

by **Ganesh T S** on September 30, 2015 8:59 AM EST

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Posted in   Android TV   Media Streamer   Shield   NVIDIA

The NVIDIA SHIELD Android TV was launched back in May with the intent to dominate the over-the-top set-top-box (OTT STB) landscape. Premium features such as full HDMI 2.0a support and HEVC Main10 decoding enabled the coveted Netflix 4K certification. No other set top box (including the recently announced 2015 Apple TV and the Amazon 4K Fire TV) has anything close to the SHIELD Android TV in terms of advertised hardware and software capabilities. Our review, however, pointed out a few missed opportunities. Aside from the experience with Android TV as a software platform (something for which NVIDIA is not directly responsible), we had indicated that NVIDIA could have done a better job of codec licensing and configurability to cater to HTPC enthusiasts. Today, NVIDIA is announcing an OTA update to address some of those issues.

Today's OTA update (v2.0) brings a notable set of features for local media streaming

- Expanded codec and container support:
  - Adds pass-through support for Dolby TrueHD and DTS-HD Master Audio lossless audio*
  - Adds MPEG2, VC-1, and WMV9 hardware-acceleration
  - Adds M2TS, ASF, and WMV container support for VC-1
  - Adds WMA audio support (including WMA Pro, and WMA Lossless)

Currently, the above set of features are available for use in the native Android Video and Photo apps. NVIDIA is working closely with third-party app developers (including Kodi and MX Player) to ensure that these media players will also be able to take advantage of the newly added features.

The other important feature that is being made available is the ability to set the display refresh rate to 23.976 Hz. Currently, it is a static setting available under Settings > Device > HDMI > Resolution. Only 60 Hz (US) / 50 Hz (Europe) and 23.976 Hz are currently available, and the UI is also set to the selected refresh rate. However, NVIDIA expects third-party app developers to be able to dynamically alter the display refresh rate based on the content frame rate using the new APIs. This will be important since consumers should not be playing games or actually be navigating the user interface at 23.976 Hz. Syncing up the display refresh rate to the content frame rate should hopefully turn out to be a transparent exercise with the third-party apps.

The new firmware also brings support for overscan adjustment (particularly useful for display sinks that tend to overscan, resulting in a cropped view of the interface). Most TVs don't need this.

Other enhancements include native 4K rendering for select Android games (*Beach Buggy Racing*, *Bombsquad*, *Hardwood Solitaire IV*, *Riptide GP 2*, *Kosmik Revenge*, *Video Poker Duel*, *Leo's Fortune*, *Machinarium*, *Meltdown*, *Never Alone*, *Samurai II*, and *Sky Gamblers: Storm Raiders*), ability to transfer data between USB storage and a microSD card, ability to manually turn off the SHIELD controller and lowering the audio latency by as much as 40ms compared to standard Android. The last aspect is especially important for gaming, and it will be one of the prime reasons to pick up the update before checking out the GeForce NOW cloud game streaming service that is getting launched today.

NVIDIA has also updated the table comparing the SHIELD Android TV to the competition. The latest version is reproduced below. As usual, these are NVIDIA's claims and need to be taken with a pinch of salt.

Feature	Apple TV	Apple TV (2015)	Roku 3	Fire TV (2015)	SHIELD
Raw Performance	1x	12x	1.3x	7x	34x
UI Performance	Average	Good	Average	Good	Best
Voice Recognition	Not Supported	Good	Limited	Good	Best
4K videos	No	No	No	Yes	Yes, 60 fps
10-bit Color (ITU-R BT-2020) and HDR video	No	No	No	TBD	Yes
Netflix 4K videos	No	No	No	Yes	Yes
24-bit/192 KHz Audio output	No	No	No	Yes	Yes
H.265 and VP9 support	No	No	No	No VP9	Yes
HDMI 2.0 and HDCP2.2	No	No	No	4K 30	Yes – 4K 60
HDMI-CEC	No	Yes	No	No	Yes
Gaming Performance	Poor	OK	Poor	OK	Best
Cloud Gaming Experience	Not Supported	Not Supported	Not Supported	Not Supported	Best
System Memory	512 MB	512 MB	512 MB	2 GB	3 GB
Storage Capacity	8 GB	32 GB	256 MB	8 GB	16 GB
USB 3.0 ports	0	0	0	0	2
USB 2.0 ports	i1	0 (only for support)	1	1	1
Wi-Fi Speed	802.11n	802.11ac	802.11n	802.11ac	802.11ac
Ethernet Speed	100 Mbps	100 Mbps	100 Mbps	100 Mbps	1000 Mbps
MicroSD slot	No	No	No	No	Yes
Controller/Remote Features					
Console Grade Controller	None	None	None	None	Yes
Low Latency Controller	None	None	None	None	Yes
Headset Jack on Controller or Remote	No	No	Yes	No – Remote; Yes-controller	Yes – both
Microphone input on Controller or Remote	No	Yes	Yes	Yes	Yes
Rechargeable battery	No	Yes	No	No	Yes

We did go through the various aspects with concrete 'yes' or 'no' answers and the table seems to line up well with the actual specifications of the competitors' products. The SHIELD Android TV continues to justify the premium flagship tag despite recent entrants such as the 2015 Apple TV and the Amazon 4K Fire TV. NVIDIA's willingness to also focus on local media playback is good news for the general consumers as well as HTPC enthusiasts. For this reason alone, we can and do recommend the SHIELD Android TV over competing OTT STBs.

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nathanddrews - Wednesday, September 30, 2015 - link
VERY important update!

"Adds pass-through support for Dolby TrueHD and DTS-HD Master Audio lossless audio*"

Is the asterisk a typo or is there something special we should know about the passthrough support?

REPLY

jublin - Wednesday, September 30, 2015 - link
Probably an asterisk to say you must have a compatible receiver, for the cover-your-arse aspect.

REPLY

JohnGalt1717 - Wednesday, September 30, 2015 - link
The * means that the app has to support it first. So Plex etc. have to be updated first.

Any idea when this will be available? Mine still isn't showing up.

Also any rumored availability of Amazon Instant Video? I'm using my xbox one right now because of no Amazon and Plex not having delete functions among the list above and would love to use the Shield instead.

REPLY

DigitalFreak - Wednesday, September 30, 2015 - link
The update will be available tomorrow (10/1).

REPLY

JohnGalt1717 - Wednesday, September 30, 2015 - link
Excellent! Thanks!

REPLY

Kerome - Wednesday, September 30, 2015 - link
There doesn't seem to be that much interest in this box... Why don't they go the standard platform owners route and create some high end platform specific content to draw the crowds?
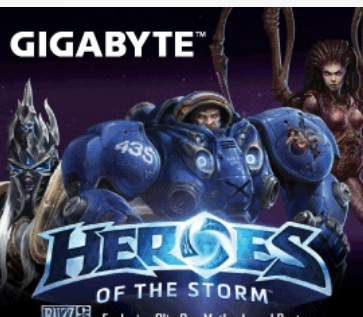
REPLY

Morawka - Wednesday, September 30, 2015 - link
its the only real 4k streaming box and it's being advertised as such.. Best buy picking this up will really push sales.

Anyone serious about watching 4k content on their new 4k tv, is throwing their money at nvidia right now.
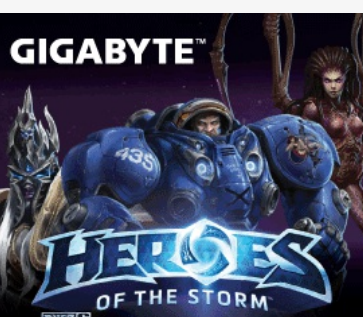
REPLY

schizoide - Wednesday, September 30, 2015 - link
It's very clear that the ShieldTV is the best media streamer on the market, by most measures. It only lacks HBO GO and Amazon video, and HBO GO is supposedly "coming soon" (promised since June).

Thing is, the FireTV is literally _half_ the price. Oh, and it supports HBO GO and Amazon video, right now. Kodi runs great too.

Is the FireTV as snappy as the ShieldTV? Certainly not. But even the old FireTV is more than fast enough to stream video, and the new one is twice as fast. Again, coming in at $99.
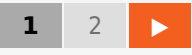
jm9843 - Wednesday, September 30, 2015 - link
FireTV also has half the capabilities if we're being generous.

Wolfpup - Wednesday, September 30, 2015 - link
Depends on what capabilities you're looking at. IMO a media streamer that can't stream one of the big services is pointless. Yeah Shield is more powerful, but why do I care? I'm not going to run games or programs on it, I'm using a PC or console for that. It can stream games (I guess) from a PC with a recent Nvidia GPU, but that's its draw IMO, and the Steam box thingee is 1/4 the price (not sure whether Nvidia or Steam's streaming support for all games is better though).

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