

Controversy has exploded around Apple’s new Lightning connector that makes most accessories to one’s older Apple products obsolete. But the frustration of accessory renewal is the fact, not the controversy.

The newest debate claims **the new Lightning connector isn’t putting out full 1080p**.

If you want a proper 1080p signal from your iPhone or iPad, you’d think the best bet is to plug it in directly using Apple’s own Lightning digital AV adapter. But some industry experts suggest it is introducing noticeable compression artifacts.

A well-known software developer (writing in an aptly named “Panic Blog”) discovered that using the old Dock Connector AV adapter will output a full 1920 x 1080 video mirroring signal, but the newer Lightning AV adapter tops out at 1600 x 900.

Incredible, right? So the software developer goes hardware nuts and dives into the adapter and finds it is employing the same compression used in AirPlay to stream out the video. That’s his conclusion. Apple’s is…well, they don’t really talk to their customers as much as preach to them…so "No Comment."

Then, one anonymous web commenter gives so much detail on this subject that most believe he or she is an Apple engineer. That commenter claims Lightning isn’t capable of outputting an HDMI signal, so (instead of adding complexity to each device) HDMI functionality was moved into the adapter.

Which would mean the iPhone uses the same hardware H.264 encoding it would use to send video wirelessly over AirPlay. It then sends that compressed data out of the Lightning serial bus, and directly to the adapter. The SoC decodes the video, and handles the rest of voyage to the end of the HDMI plug. **All of the heavy lifting is done by the adapter.**

iOS updates on the phone or tablet may be able to improve the quality of the output. And when iPhone gets around to this improvement, then you may hear an official comment from the Apple orchard.

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