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TV TechCheck



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“OTT + OTA” Gains Ground

In recent months, the concept of combining Internet-delivered ("over-the-top" or OTT) television content with over-the-air broadcast TV content has spawned substantial interest. As more televisions and set-top boxes (STBs) incorporate Internet connectivity, users have increasingly found less need for dedicated cable, satellite or IPTV television services (MVPDs).

One major element left out when switching to Internet-delivered television content is live local broadcast TV, which is typically not streamed online today. Therefore the idea of a consumer product combining over-the-air reception with an OTT receiver holds some appeal, particularly for the "cable cutters" who are currently seeking alternatives to MVPD services (or the "cable nevers" who have never had such service in the first place, and likely never will).

This trend was notably accelerated last week when OTT set-top box-maker and service-provider Boxee began shipping its "Live TV" ATSC tuner dongle, which is intended to be attached to the company's existing or new STBs called the Boxee Box (manufactured by D-Link). The tuner dongle provides Boxee Box users with the ability to receive free over-the-air (OTA) DTV broadcasts, including HDTV services. (Boxee's STBs cost \$149, and the tuner dongle costs an additional \$49. Boxee does not charge users a service or subscription fee.) The tuner dongle also includes ClearQAM capability, for receiving unencrypted basic cable service where supported.

Boxee has updated its STB software to support the tuner dongle, which includes the provision of program guide information for live TV channels. No DVR functionality is included, but Boxee hints that this may be forthcoming, perhaps as another modular add-on. (Given that the original Boxee STB was intended solely for OTT on-demand viewing from storage "in the cloud," local storage capability was not really required; so to minimize device cost, no local pause buffer or recording has been included in current Boxee devices.)

As the photo shows, the Boxee LiveTV device includes a USB port (for interface to the Boxee Box) and an F-connector for attachment to the small indoor TV antenna supplied with the dongle, or to a user-provided external antenna or ClearQAM cable feed).

For the many users who view their Boxee Boxes through a TV display that already includes an ATSC/QAM tuner, the new tuner add-on allows simplified operation, such that the user will not have to switch between sources, and can view both online and over-the-air content through a single device. Perhaps more importantly, Boxee's on-screen program guide also provides a single view of content available both from online and OTA providers—a feature that will become more valuable if DVR functionality is eventually added.



Boxee is not the only player in this converged "OTA+OTT STB" environment. Late last year, Channel Master began shipping the first product in its Channel Master TV line of OTA+OTT HD DVRs. The CM7400 offers OTT content via the VUDU service (operated by WalMart), integrated WiFi (802.11b/g/n), dual ATSC/ClearQAM tuners, and a 320 GB hard disk, offering up to 35 hours of HD or 150 hours of SD recording. The unit retails for \$399, with no antenna included, but again, no subscription fees are levied, and a live TV program guide is provided.

A number of related announcements were made at CES 2012, including Iomega's debut of its own version of the Boxee platform. There are also an ever-changing inventory of do-it-yourself hardware and software components that allow enthusiast consumers to build their own solutions with tuner cards, hard drives and applications on general-purpose platforms. Deriving a singular, integrated OTT+OTA program guide remains elusive on such systems, however, making content navigation a cumbersome task for many users.

Meanwhile, DVR pioneer TiVo continues to offer a number of products direct to consumers that now combine OTT with dual OTA tuners and up to 150 hours of HD recording. (TiVo does require a monthly subscription for its integrated program guide.)

Finally, most of these products also offer a variety of built-in apps for connection to social media and photo-sharing services, as well as interfaces to other devices such as laptops, smartphones and tablets for portability of content—another new and increasingly desirable aspect of television consumption today.

While the world of TV continues to change, over-the-air broadcast content remains an important element of it. Innovative products such as those described here should help keep it that way.

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