

### Wideband Smartphone Apps for use with Comrex ACCESS and BRIC-Link

#### Introduction

Using smartphone apps for remote broadcasts is a hot topic. In the category of high-quality, real-time audio, apps have a definite place in the toolbox. They don't completely replace field codec hardware, mainly due to limitations like wireless-only operation, lack of stereo, and unwieldy audio connections. But for quick drop-ins and news reports, they can be effective in banishing the plague of "cellphone sound" in your on-air product.

Comrex ACCESS and BRIC-Link codecs implement the VoIP protocol known as SIP (Session Initialization Protocol) and therefore can be made to interwork with several smartphone apps, some of which will deliver wideband audio to and from the studio codec. Here is an outline of what we have found to be useful in the iOS and Android offerings and how they can be set up to work with Comrex hardware.

Some of these are available at low or no cost and without user support, while some are full-featured professional products (with real support) that cost several hundred dollars.

#### Luci Live



Developed in The Netherlands, Luci Live is a professional mobile broadcast application that enables studio-quality reportage to be streamed via laptop or mobile phone from anywhere in the world. Luci software first appeared on the Windows/PC platform back in 2006. iPhone and MacOS versions followed in 2010/11, while 2012 saw the release of Luci Live for Android.

Luci Live has been specifically optimized for broadcast workflow. Its intuitive on-screen controls emulate console faders, while additional features such as audio capture, editing and ftp upload enable broadcast-ready content to reach its required destination in a matter of minutes.

When used with Comrex hardware codecs, Luci Live can deliver HE-AAC audio in both directions with moderate delay. Connections can be made via the industry-compatible N/ACIP protocol (which uses SIP), or the native Luci RTP mode. (RTP or N/ACIP connections require some setup on the Comrex side and this is outlined in the user manual.)

Current Luci versions include Luci Live for iPhone and Android, priced at \$299.

#### Luci Live Lite

Introduced at NAB 2013, a limited feature set version of Luci Live available at just \$30.

Luci Live Lite removes the record, edit and ftp functions from its big sister, and limits your codec choice to the slightly lower quality G.722. But in all other ways, it echoes the pro interface of Luci Live, providing an extremely easy to use application for budget broadcasters who need simplicity in both setup and operation.

## LinPhone

If you're looking for a free SIP application to use with our codecs, we recommend Linphone. Linphone uses Opus, an audio algorithm that's both high-quality and low-delay. Opus has also been integral to ACCESS and BRIC-Link since firmware version 3.0. Additionally, Linphone doesn't require registration and can dial directly to the IP address of your codec. It's very easy to use, and is compatible with both Android and iPhone. To learn more about setting up Linphone for Comrex compatibility, see our [Technote here](#).

