

## EQUIPMENT REVIEWS

## JK's Outerloop, innkeeper and Interchange

BY JOEY GILL

A production facility (remote or studio) can have the latest live UHD video gear, along with the cleanest AES digital audio plant on the planet; how-

## EQUIPMENT REVIEW

ever, if communications among personnel suffer during the show, the product is likely going to suffer as well.

One company that has been bringing "cool audio things" to the broadcast marketplace for years is JK Audio, and they're at it again with some really neat aids for production communications. These include their new Outerloop Bluetooth beltpack, their innkeeper telephone hybrid and their Interchange phone bridge. I was recently given the opportunity to test drive all three of these devices and really couldn't pass this one up.

## FEATURES

In getting started, I should tell you that the JK Audio Outerloop is a "standard-looking" intercom beltpack, with headset and five-pin intercom connectors located on the bottom. What makes it different is a switch that's also located on the bottom for selecting "Phone or Headset," and a pushbutton that's labeled "Pair."

The top of the Outerloop beltpack box sports "Send" and "Receive" level knobs that are large enough to use even with

gloves on, and there are also the old-familiar "Talk" and "Power" buttons. Also located on top are some LED indicators for Power, Bluetooth, and Talk. The unit can

for answering the phone (if the unit is not operating in the "auto" mode), there's a "Drop" button for dropping the line, and six LEDs included for audio level metering

included in-line power supply that connects via a power jack.

The JK Interchange device operates as either a standalone or 1/2RU intercom phone bridge and is equipped with front panel controls that include a "Talk/Off/Auto" switch, a Com 1-A/Com 2-B switch and LED indicators labeled "Talk" and "Power."

## IN USE

I should note that taking on three separate items in a single product review is kind of unusual for me, but in this case, it made sense, as by their nature these three units are complementary.

I'll start by describing the functionalities of each of these devices in general terms, the Interchange is used to bridge standard intercoms to the outside audio world, the innkeeper provides users a way to tie phones to that audio world and the Outerloop lets you connect Bluetooth devices (cellphones) to a professional intercom beltpack.

In beginning my review, I had to pick an "end" at which to start. The innkeeper seemed somehow the most logical of the three tools to begin with, so I set about interfacing a POTS line to the unit to achieve a hybrid connection with my television station's Clear-Com IP-based intercom system.

To connect to the Clear-Com Matrix



JK Audio's Outerloop, innkeeper and Interchange units

connect (pair) with Bluetooth phones, or another Outerloop beltpack for a short and private communications link. Power is supplied via a single 9 Volt battery.

The innkeeper can be used in standalone or 1/2RU configurations and functions as a phone hybrid with a number of front controls including a "Call" button

(three for send, three for caller) and also screwdriver adjustments for both Send and Caller. The rear of the unit has two four-pin RJ-45 jacks for line and phone, an "Auto Answer" button, XLR audio connectors for both "Caller" and "Send, lines" and an eight-pin RJ-45 for remote (intercom phone bridge). The unit is powered by an

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Plus, I needed to use the audio I/O on the intercom matrix mainframe and connect that to the innkeeper. I attached the phone line, then the audio I/O, port using the XLR connectors, and finally the 9 Volt DC power adaptor. I called the number associated with the line and the green ring LED on the unit illuminated. I let it ring for a few times, then pressed the "Call" button to answer. (Later, I would discover the "Auto Answer" button located on the back.) After answering, I found that could communicate via my cellphone with the station's main intercom system.

Now for the coolest part of my experimentation with these new devices: I activated the Bluetooth "search for devices" function on my phone, powered up the Outerloop, connected a set of Eartec intercom headphones, flipped the switch to "Phone," and finally pressed the "Pair" button. In a few seconds, my phone had paired with the Outerloop. I called the POTS line, and the "auto answer" feature on the innkeeper picked up. My unit was immediately placed on my intercom matrix, appearing as a beltpack, including

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## APPLICATION

Remote and studio audio (intercom) connectivity

## KEY FEATURES

High-quality audio, compact form factor, reasonably priced and great versatility

## PRICE

MSRP as tested: Outerloop, \$420; Interchange, \$820; innkeeper, \$575

## CONTACT

JK Audio  
815-786-2929  
www.jkaudio.com

send and receive levels and push-to-talk.

I then called for my master control operator and he answered clearly. We swapped stations, and the audio path was very clear both ways. Like most Bluetooth devices, the useable distance is close to 40-feet; but with the beltpack on my hip, and the phone in the holster, that was a non-issue. If, however, you wish to connect one Outerloop to another via Bluetooth, then the 40-foot distance is relevant.

The next piece of the puzzle was to

connect the Outerloop to a standard three-wire intercom system. We have an older Telex IC4M intercom that's used in our station's remote trailer and was included as part of my evaluation, I ran an audio cable from that trailer into the TV station's tech core and used it to connect the Telex IC4M to the back of the Interchange (via the "Intercom Connection" port).

Next, I connected the "Caller" out from the innkeeper hybrid into the "Line In" on the Interchange, and then connected the "Send" port on the innkeeper to the "Line Out" on the Interchange, and the remote RJ45 connector between the innkeeper and Interchange. The metering on the front of the Interchange lit up and we had connectivity.

After dialing in on the Outerloop (in this case, from my cellphone), I was able to communicate very clearly via the older Telex system. It wasn't quite as clear as the newer (but not brand-spanking new) Clear-Com package, but that Telex system in my trailer is well worn, and a bit battle weary. I did a little level tweaking and this went a long way to help clear up the signal. However, even at its worst, the audio delivered through the system was quite useable.

## SUMMARY

These are some really slick items—all the way around. The paper quick-start booklets supplied with the gear were a perfect blend of info and pictures, helping to make the setup process a breeze. I ran the units for a week or so with no issues. The reported battery life on the Outerloop is at least 10 hours, and during my trials I was not able to run down the battery that I was using.

The Outerloop is a great idea, and will certainly find favor in many intercom applications.

In general, the buttons and knobs on all three units are all very solid, and provide a great feel and tactile feedback. Adjustments are not overly-complicated and are easy to reach. I would like to have had the "auto answer" button on the front of the innkeeper hybrid, but I'm stretching a bit to find criticism. I found all of these products well worthy of the JK Audio "brand."

*Joey Gill is chief engineer at WPSD-TV in Paducah, Ky. and has been with the station for 30 years. He has worked in television since 1977. He may be contacted at respond2jgill@yahoo.com.*

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