

THE ALL NEW **GUEST MODULE™ GM2X6** TALK SHOW CONTROL SURFACE



**JK Audio**

## LET'S TALK...

The single most important function of a talk show system is getting excellent caller audio on the air. While there are many ways to reach that goal, it is important to look at all of the attributes of a talk show system, making sure that everyone at the station has the ability to get that caller on the air. From selection and purchase, to installation and training, every step can be made easier with the right equipment.

The core of our system is the innkeeper series digital hybrid. The innkeeper series started over 12 years ago with the introduction of our model

innkeeper 1. The INN1 was our first digital hybrid to use our Dual-Convergence echo canceler algorithm. This proprietary algorithm allows near perfect removal of the transmit signal from the caller audio output, without the need to blast a noise burst down the phone line. This is accomplished without the use of Non-Linear Processing (NLP) compromises such as half duplex or speakerphone type gating, resulting in a very clean, natural conversation.

In 2005 we added our innkeeper 2 and innkeeper 4 Digital Hybrids which remain the most feature packed hybrids on the

market. Boasting a 600 MIPS DSP for deep echo cancellation, these extremely flexible units have become a staple in TV studios and SAT/ENG trucks for behind the scenes IFB communications. INN2 features a conference mode with several caller output options, making it a breeze to connect to your console. Recent firmware updates provide enhanced audio quality while adding RS-232 control capability.



In 2007 we set the bar a little higher on our innkeeper 1x by upgrading to a 600 MIPS DSP. This added horsepower allows extra deep echo cancellation and improved signal processing, while adding an RS-232 port for remote call control.

With the latest firmware enhancements, innkeeper models 1x/1rx, 2, and 4 sport significant improvements in audio quality. Audio enhancements that move beyond simple

objective lab measurements of performance, utilizing advanced psycho-acoustic based signal processing techniques. Dramatic improvements using techniques that take into account the physiological and psychological models of human hearing to achieve performance that goes beyond mere dB separation measurements. There are areas of the spectrum where our ears are more sensitive to non-linearities. Extra processing resources are focused on these areas

to ensure natural sound from every caller.

Are your analog phone lines going away, or already gone? No problem. Innkeeper digital hybrids are globally compliant and compatible with most PBX and VOIP analog line ports. We come to the talk-show table with a base of thousands of hybrids installed around the world.

**CLEAN CALLER AUDIO FROM ANY PHONE LINE, AND HIGH SPEED SERIAL REMOTE CONTROL.  
WHAT WERE WE PLANNING?**

## ENTER THE NEW CONCIERGE™ 2X6 SWITCH CORE

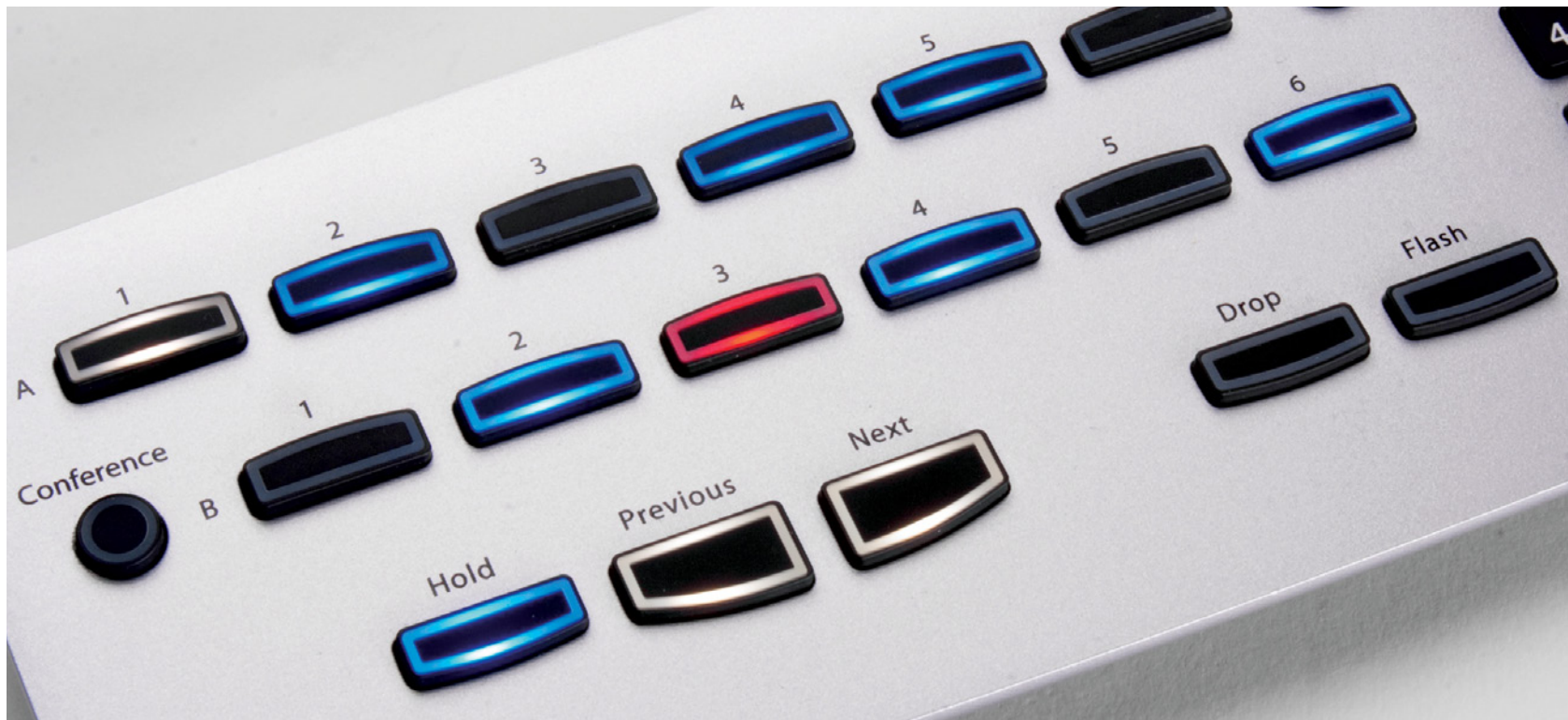


Concierge allows connection of two hybrids across six phone lines. The switch matrix routes six incoming analog phone lines to JK Audio innkeeper 1rx™ or innkeeper 2™ Digital Hybrids. A firmware upgrade is all that is required to make most older model INN1x/INN1rx and INN2 hybrids compatible with this new system.

Concierge adds music on hold input, auxiliary phone integration, and intuitive call control. Two Concierge switch cores can be bridged together, providing six additional phones lines for a 2 hybrid, 12 line system. Front panel DIP switches, hidden behind an access door, allow programming features such as the number of rings for Auto-Answer, and enabling Auto-Drop feature.



- |                                 |                                      |                       |
|---------------------------------|--------------------------------------|-----------------------|
| 1. Phone Lines (6)              | 6. Expansion Bus to second Conclerge | 11. Hold audio input  |
| 2. Row A phone line to Hybrid 1 | 7. Control data for Hybrid 1         | 12. USB control port  |
| 3. Row A auxiliary phone        | 8. Control data for Hybrid 2         | 13. 100-240 VAC input |
| 4. Row B phone line to Hybrid 2 | 9. Row A Guest Module bus            |                       |
| 5. Row B auxiliary phone        | 10. Row B Guest Module bus           |                       |



## THE ALL NEW GUEST MODULE™ CONTROL SURFACE

Up to eight Guest Module control surfaces can be added to provide remote control of the switch matrix over CAT5 cable. Guest Modules are hot swap-pable without losing calls, and feature line selection buttons that change color to indicate call status. Guest Modules are available in GM1x6, GM2x6, and GM1x12 desktop and rack mount versions. They feature durable aluminum and steel construction with a sealed silicone rubber keypad.

The “Hot-Swappable” capability is not a repair feature. On the contrary, we expect Guest Modules to function for years without fail. The hot-swappable feature speaks more about the architecture of the system. Call control resides in the Concierge switch, allowing Guest Modules to be added and removed without losing calls.

This design allows you to simply add or move Guest Modules during a show. Go ahead, add a second control surface for a guest during the morning show, or move an extra controller into the news studio during elections.

The user interface is quite simple, with only a few visual indicators to remember. You will immediately recognize the similarities to legacy PBX systems:

Ringin=Flashing white;

Hold=Wink blue;

Talking=Solid white;

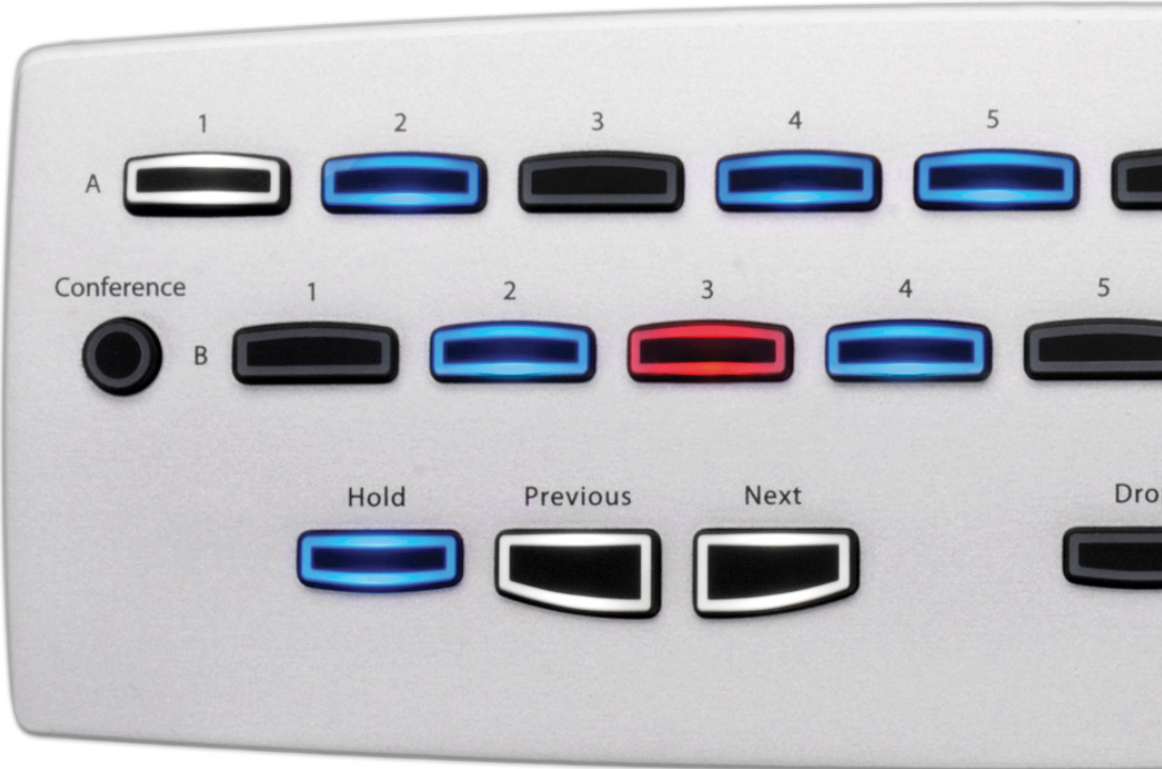
In Use=Solid red;

From here we add context sensitive call control, lighting function buttons only when they are available options. The GM2x6

provides visual indication of calls that were put on hold locally vs. those that were put on hold in another studio. There are no special key combinations to remember. No “double press” or special sequences to learn. The control surface will guide you through, presenting options as they become available.

Our two favorite buttons are Previous and Next, which light only when they are available options. Previous takes you to the last person that you were talking to (provided they are still on hold). Next takes you to the oldest call in the queue.







## CHOOSE YOUR WEAPON

The first decision is whether you intend to conference two callers together, putting both calls on the air simultaneously. This can be accomplished with a low cost innkeeper 1x/1rx by allowing the system to mix two calls together into one audio input on your console. Keep in mind that you will not be able to adjust the level of the caller's voices independently if one caller should prove quieter than the other. Innkeeper 2 uses two separate digital hybrids to bring both callers into separate inputs on your console, while

providing the necessary cross-connections so everybody can hear each other.

If conferencing is not in your game plan, you may wish to build your system with GM1x6 controllers to keep it simple. If you are building a small system, the GM1x6 offers all the features of the GM2x6 without the possible confusion of monitoring the second half of the 2x6 switch core, which may not even be in use (or at least not just yet).

Add to the system whenever you would like. Simply plug in additional Guest Modules, up to four per hybrid bus. Two jacks on each Guest module simplify wiring by allowing a daisy-chain from one controller to the next. Mix GM1x6 and GM2x6 controllers as you wish. No system programming is required. Guest Modules are simply control and display interfaces, and can be added or removed while the system is running without fear of losing calls.



## SYSTEM EXAMPLES

### ONE STUDIO: 1 HYBRID, 6 LINES



innkeeper 1rx



Concierge™ 2x6 | BUS A



GM1x6

### STUDIO+SCREENER: 1 HYBRID, 6 LINES



innkeeper 1rx



Concierge™ 2x6 | BUS A



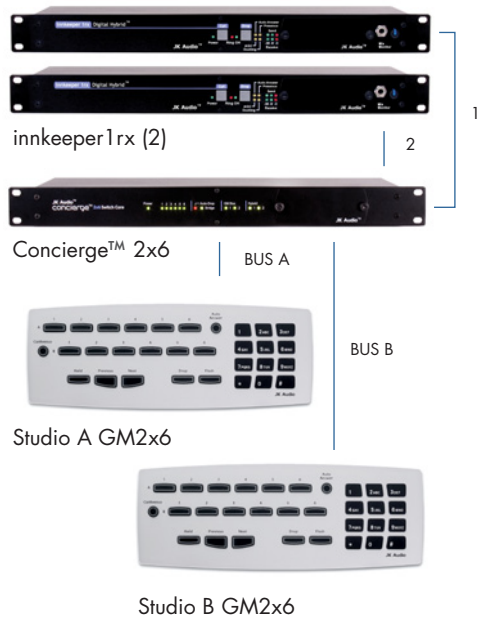
BUS B

GM2x6

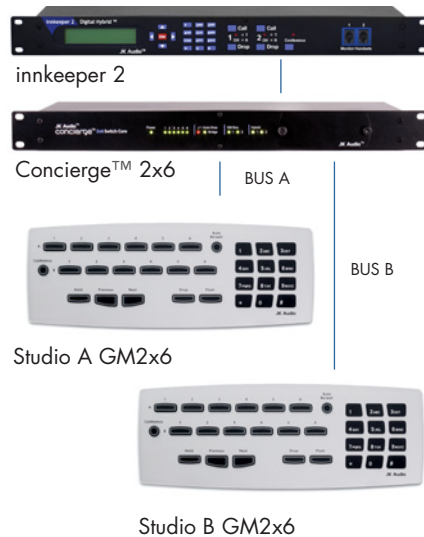


GM1x6 Screener

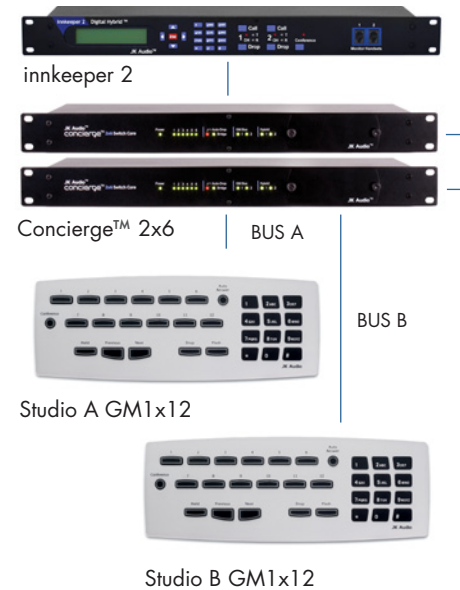
## TWO STUDIOS: 2 HYBRIDS, 6 LINES



## TWO STUDIOS: 2 HYBRIDS, 6 LINES



## TWO STUDIOS: 2 HYBRIDS, 12 LINES



## SPECIFICATIONS

### CONCIERGE 2X6 SWITCH CORE

Power	100-240 VAC 50-60 HZ
Size	1.75" x 7.3" x 19" ( 4.5 x 18.6 x 48.3 cm )
Weight	5.4 pounds ( 2.4 kg )

### GM1X6, GM2X6, GM1X12 CONTROL SURFACE

Size	9.5" x 3.5" x 1.2" ( 24 x 9 x 3 cm )
Weight	1.25 pounds ( 0.5 kg )

### GM1X6R, GM2X6R, GM1X12R CONTROL SURFACE

Size	19" x 3.5" x 1.2" ( 48 x 9 x 3 cm )
Weight	1.75 pounds ( 0.8 kg )

