



Tech Works™

"Making Specialized Communication Easy"

Project Profile

CI-BUSS Brings Clear Sound to Dixie Regional Medical Center

Consistently voted one of the top 100 hospitals in the US, Intermountain Dixie Regional Medical Center is one of the largest and most progressive health care facilities in the Southern Utah and Nevada region. Its sprawling campus is home to a number of state-of-the-art, high tech laboratory and surgical facilities, staffed by some of the best professionals in the business.



Recently, the hospital installed new CI-BUSS communications systems from Yorba Linda, CA-based Tech Works in several of their Cardiac Catheterization lab facilities. Randy Turek of Dixie's Cardiology Department explains the challenges of communicating within a sterile facility.

"The doctors inside the clean rooms need to be able to communicate with staff outside the glass, and for quite some time, that communication was via a hanging microphone," says Turek. "The sound quality was terrible. The rooms themselves are a very boomy, reflective environment, with flat walls, vinyl floors, and plenty of glass, so intelligibility is poor to begin with. Communication basically consisted of a lot of yelling back and forth."

The CI-BUSS system provided the doctors with the flexibility of using lightweight headsets, desktop or ceiling mounted microphones, with powerful digital signal processing and automatic level control for clean, intelligible, hands-free communication.

"We had tried a number of different solutions, and when we looked around at other facilities to see what they were using, we realized that everyone was having the same issues," Turek observes. "Everyone was putting together systems with different components from different manufacturers, and the results were never quite as good as they could be. The CI-BUSS system was the first we found that was specifically designed for this purpose. We were able to configure the entire system and choose the components we needed for each application."

With the CI-BUSS system in place, doctors are now able to communicate to staff in normal conversational tones. That has its own advantages, says Turek. "We found that after we switched to the CI-BUSS, the satisfaction levels in our patient care environment went up. Patients were happy we were no longer yelling back and forth."

About Tech Works

Tech Works is a US-based manufacturer of high-quality, highly specialized communications systems for the healthcare, security, corrections, and education industries. Based in Yorba Linda, California, Tech Works was founded in 1984 with the goal of creating powerful communications solutions for the most demanding environments. Our products are designed to meet the unique challenges of our customers, in applications where clear communication can be critical.



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Application:

Dixie Regional Medical Center Cardiac Catheterization Lab Intercom

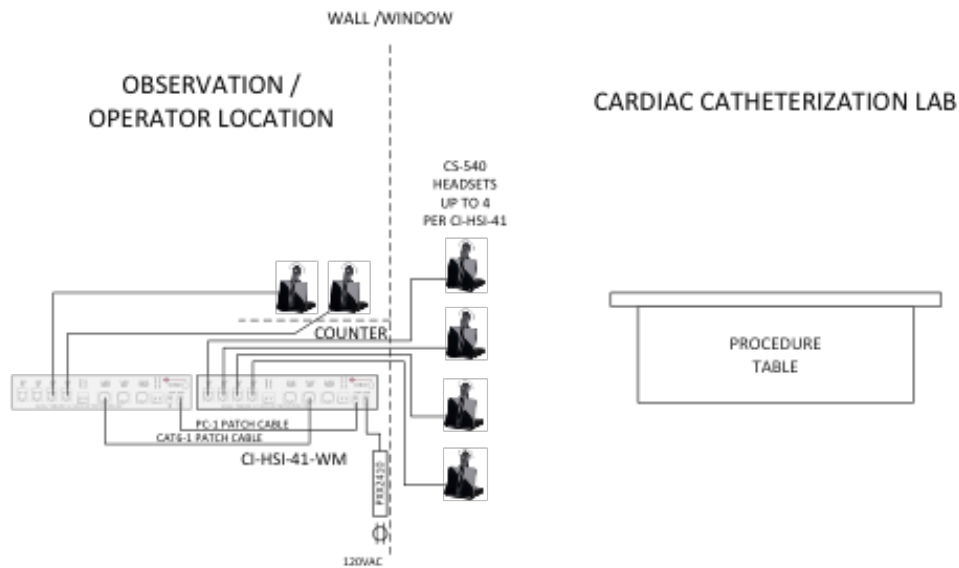
Wireless Headsets do all of the work in the Dixie Regional Medical Center, Cardiac Catheterization Lab Intercom. Headsets provide privacy with better acoustic coupling, while allowing full mobility for the staff.

The Collaborative Intercom Headset Interface (CI-HSI) allows groups of 4 headsets to be added to the conversation as required. Each CI-HSI includes the interface for four headsets plus a selectable "Call" switch and optional "Talk" switch to allow one headset to take priority control of the system. Multiple HSIs can be connected for additional groups of four headsets as required.

All Tech Works CI-BUSS products connect to each other with just a standard CAT6 patch Cable from one unit to the next. Options such as an Operator Desk Console (ODC) and a Microphone Speaker Interface (MSI) can be added at any time if required.

Tech Works PA-BUSS products can also be added at any time to provide background music and paging functions if required.

System Design Layout and Connections



Components

Part #	Qty.	Description	Purpose / Use
CI-HSI-41-RM	2	Headset Interface	Headset Audio Processing
CS-540	6	Wireless Headset	Staff Mobility
PXX-2410	1	Power Supply	24 VDC 1 Amp
PC-1	1	Modular Power Cable	Power Connection
CAT6-1	1	Computer Patch Cable	Audio and Signal Connection