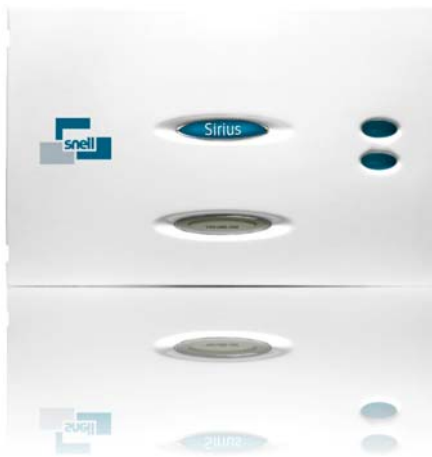


Case Study

Snell Sirius Routers at the Core of Christian Broadcasting Network's Digital Infrastructure



Broadcast network implements second Sirius router to handle up to 256 x 256 audio signals.

The Customer

U.S.-based Christian Broadcasting Network (CBN) is a multi-faceted non-profit organization that provides programming by cable, terrestrial broadcast, and satellite to approximately 200 countries, with a 24-hour telephone prayer line. Chief among CBN's broadcasting components is The 700 Club, a daily television program featuring Pat Robertson, Terry Meeuswen, Gordon Robertson, Kristi Watts, and news anchor Lee Webb.

On the air continuously since 1966, The 700 Club is one of the longest-running programs in broadcast history. Seen in 97 percent of the television markets across the United States, the show's news/magazine format presents a lively mix of information, interviews, and inspiration to an average daily audience of one million viewers. For more information, visit www.cbn.com.

The Challenge

CBN needed to expand its router infrastructure to drive the network's digital broadcasting infrastructure. The new router, which needed to support up to 256 x 256 AES audio signals, joins an existing Snell Sirius system for video routing which has anchored CBN operations since the network's transition to digital broadcasting in 2005.

The Snell Solution

CBN's original Snell Sirius router was responsible for switching 192 x 192 video inputs and outputs. The new system switches 192 x 192 AES audio signals, as well as a 64 x 64 timecode matrix.

A key component of the routing operation is Snell's Centra Workbench system, which provides control over both routers and the ability to automatically re-route signals to a redundant path in the event of a crosspoint failure.

"When we purchased our first Sirius router, we chose carefully because we would be depending on it to form the core of our migration from analog to digital operations," said Kent Denton, director of engineering for CBN. "The router's superior price/performance and ability to interface with our previous audio router gave us a smooth transition to digital and HD broadcasting, and it has worked flawlessly over the past four years. Now that the time has come to upgrade our audio router, bringing in another Sirius was an easy decision."



Case Study

Snell Sirius Routers at the Core of Christian Broadcasting Network's Digital Infrastructure

Features include dual redundant power supplies and controllers as well as four reference inputs for multi-standard operation. This allows for frame accurate switching at the correct point for multi-standard operation or simulcast HD/SD. Sirius adds significantly to Snell's existing comprehensive router range, which covers all options from the very large to the very small.

Sirius Key Features:

- 3G capable - up to 256 x 256
- First and only large-scale router offering in-router A-to-D and D-to-A conversion, fully automatic & transparent to operators
- First and only large-scale router offering mix of AES, SDI, ASI and HDTV signal in one frame
- Modular architecture for up to 512 x 512 and beyond, in blocks of 8
- 8-channel I/O cards provide excellent size to mix & match analog/digital, video/audio levels in one frame
- Internal control card provides Comprehensive control without additional rack units or cost; plus supports SNMP and Ethernet
- Compatible with the Snell Aurora external control system
- Optional redundant hot-pluggable PSUs; Optional redundant internal controller
- Optional digital video and analog/digital audio input and output monitoring

The Results

Selecting Snell, CBN has opted for proven performance and guaranteed results in an environment where it can keep abreast of all the latest developments in broadcasting

technology. In short, CBN opted for the market's most sophisticated and elegant routing solution for all its station's needs.

"When we purchased our first Sirius router, we chose carefully because we would be depending on it to form the core of our migration from analog to digital operations," said Kent Denton, director of engineering for CBN. "The router's superior price/performance and ability to interface with our previous audio router gave us a smooth transition to digital and HD broadcasting, and it has worked flawlessly over the past four years. Now that the time has come to upgrade our audio router, bringing in another Sirius was an easy decision."

For Snell, CBN is an important and valued customer. This project demonstrates that its router systems can accommodate the most diverse range of modern digital broadcast applications. CBN's need was mission critical and went to the core of its daily operations – the results have pleased everybody.

"CBN is exactly the type of operation for which the Sirius router was designed - a multi-channel, global broadcasting entity that depends on 24/7 reliability from its core technology components," said Neil Maycock, chief marketing officer for Snell. "We're pleased that Sirius played such an important role in ushering CBN into the digital age, and will continue to keep the network at the forefront of spiritual programming for millions of viewers worldwide."

"CBN is exactly the type of operation for which the Sirius router was designed - a multi-channel, global broadcasting entity that depends on 24/7 reliability from its core technology components," said Neil Maycock, chief marketing officer for Snell. "We're pleased that Sirius played such an important role in ushering CBN into the digital age, and will continue to keep the network at the forefront of spiritual programming for millions of viewers worldwide."