MAY/JUNE 2004

InfoComm Show Preview: T3 Technical Training Tour comes to Atlanta

Church Production Magazine

The Educational Magazine for Houses of Worship Covering Audio, Video and Lighting Technologies

Christ's Church of the Valley, Peoria, Arizona

Thorough product evaluations result in cutting edge systems

COLOR TEMPERATURE: THE BASICS
Critical information on lighting for video

MICROPHONE TECHNIQUES:
Ten tips for better vocals

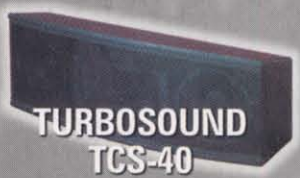
NON-LINEAR EDITING SYSTEMS
Invasion of consumer-level products: Are they the right choice for churches?

CPM REVIEWS:

ANALOG WAY
Octofade
Single Scaler
Switcher

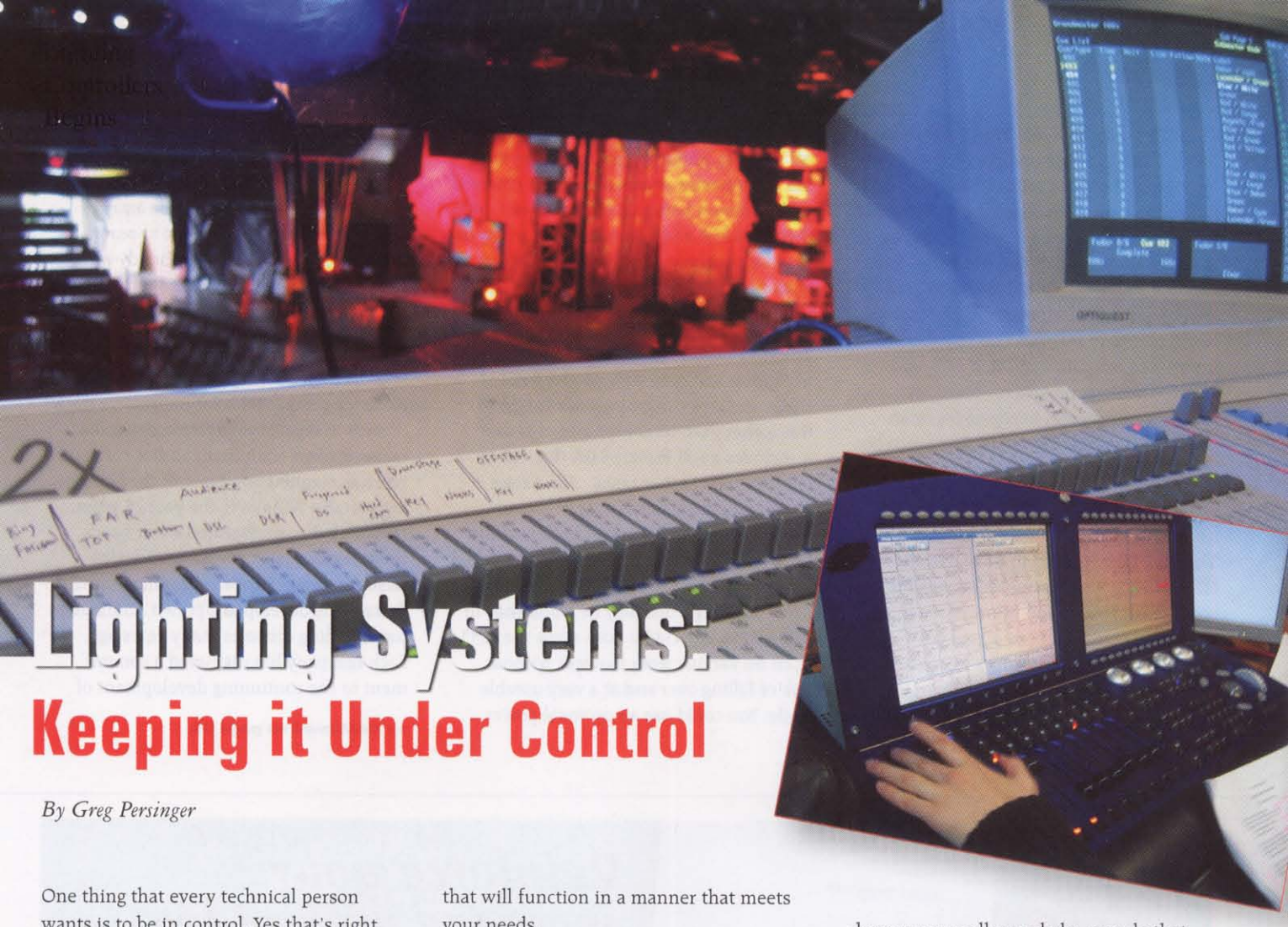
BLUE
MICROPHONES
The Ball Microphone

SABINE
SWM7000
Wireless Microphone



TURBOSOUND
TCS-40
Loudspeaker

$4.95



Lighting Systems:
Keeping it Under Control

By Greg Persinger

One thing that every technical person wants is to be in control. Yes that's right, we want to control the video, audio, lighting, and even what happens on stage. Of course since that rarely happens we stick to what we can control, which for me is the lighting.

Now I'm not exactly a control freak, but working in the lighting industry for the past 11 years has exposed me to many of the controllers on the market — some good and some bad — and I have developed my list of favorites. Not every controller will work well in every situation, so here are some things to think about when deciding on what console to purchase.

The first thing to consider when looking for a new console is an assessment of your needs. Just as tools have different functions (a hammer and a screwdriver for example), consoles have different functions as well. The idea is to find a console that will function in a manner that meets your needs.

So how do you know what your needs are? Well, list what you have done with your lighting historically (say in the past five years, and currently in the past year), and then think about what you would like to achieve in the next three years. This assessment will give you a good basis for the features that you need to find in a console.

For example, if in the past five years you have done one Easter pageant and one Christmas pageant for which you rented a 48-channel console, put it on the list. Or maybe you really needed a 48-channel console but had to make do with a 16-channel console — make a note of that.

Then list what you have done in the current year, such as one Easter pageant and one Christmas pageant and a 30-minute drama every other month. For those dramas you really needed a console that would allow you to playback cues, which you don't currently have.

Finally, list what your vision is for the future: one Easter pageant and one Christmas pageant, as well as three additional special events a year and a 10-minute drama every week during the church service. In addition to this, you would like to add 48 additional channels of dimming in the near future.

Not every church has these requirements, but as long as you know what your production needs are, you are well on your way to choosing the console that is right for you.

Next, you must consider your technical needs. Basically, this breaks down into what communication protocol your current system uses, how many dimmers you have to control, and what other devices — such

as color changers and special effects — are going to be controlled from the console.

Larger dimming systems installed in the past five years typically use the industry standard DMX communication protocol, while most entry-level systems still use the Microplex communications protocol because of the lower cost. Older dimming systems are not always DMX compatible, and may use other protocols such as analog, Microplex, or AMX to communicate with the console. If your dimming system does not speak DMX, then your system will require a console that outputs the proper protocol, or a protocol converter to translate the DMX to your system's lighting language.

Another technical concern is the number of dimmers you need to control. Some consoles only allow control of eight to 24 dimmers, while others will allow you to control 128 to 2084 DMX dimmers or devices. This means that you will need a console that will let you control at least the same number of dimmers you currently have, and possibly more for future expansion.

Along with dimmers, you will also want to take into consideration how many control channels you think that you need in a console. For instance, if you had 48 dimmers but only purchased a 24-channel console, you would have to put more than one dimmer on each control channel. If you purchased a 48-channel console, each dimmer could be on its own control channel. Both methods of operation are valid, but the higher number of control channels give you greater flexibility, but this flexibility comes at a higher price. Don't forget to include color changers and special effects in your counts as well as any future dimming expansions when considering how many channels you need.

The last needs to consider are those of your operators. This is the group of people that are going to program and run the console on a regular basis. Although most lighting consoles operate on similar principles, each console has its own syntax, or language, that it uses to operate. Some consoles are very simple to learn while others are much more complex. How steep a learning curve the console has should be a consideration when choosing a console. Look for a console that has easy-to-learn basics while having very powerful advanced features, as these consoles offer the most flexibility.

Now that you know and understand your needs, how do you begin shopping? Start with the manufacturer's spec sheet, as this will tell you if a console can meet your dimming and control channel requirements. These can be found on the manufacturer's website or from your local dealer.

Also, ask other churches what console they are using and what they like and dislike, and if the would have purchased something different if they had it to do over again.

You can also talk to your local lighting dealer and see what they recommend and why, or you may want to consider hiring a lighting consultant to help you map out your needs and make recommendations.

Also to aid you in your control quest, I have included quick-links to manufacturers whose products are regularly installed in churches at the end of this article.

Once you have several consoles in mind that you think would meet your needs, arrange with your dealer for a demonstration, or spend the money to rent the consoles for a few days. This will allow you to get a feel for each console and determine if it will work for you or not. Also, take the following into consideration:

How well is the console made? Are the faders and knobs sturdy or flimsy? The sturdier the faders, the longer it will last.

How long has this console been on the market and does the manufacturer support their older products? Your purchase of a lighting console should be viewed as an investment of 10 years or longer. You don't want to purchase a console that is going to be obsolete in a year.

What kind of support does the manufacturer offer? Will they help you when you have a problem or are you on your own to find the fix?

What storage options are there? Does the console have a disk drive, memory card, or nothing at all? Consoles with disk storage allow greater flexibility as you can save your shows on cheap and readily available floppies or CDRs. Memory cards are better than nothing but are generally harder to find and more expensive.

Is it hardware-based or PC-based? All electronic products tend to crash at one time or another, but PC-based systems seem to crash more often then hardware based systems. If you purchase a PC-based system, include the cost of the PC in the price since you want a dedicated PC for this job.

Does the console have a video monitor? Consoles with video monitors tend to be easier to program because of the additional feedback offered.

Do most functions have buttons and faders? It has been my experience that most amateur operators have an easier time learning a console with hard faders and buttons than virtual faders and function keys.

Although this article probably didn't solve all of your control issues, I hope it makes you aware of your needs for control and gives you the basic tools to find the perfect lighting console. After all, it's about keeping your lighting under control. Now if I could just figure out how to control the band. Hmmm.

Greg Persinger is a lighting consultant and system designer based in Nashville, Tennessee, as well as the lighting clinician for the Church Production Magazine T3 technical training seminars. He can be reached at greg@vividillumination.com.

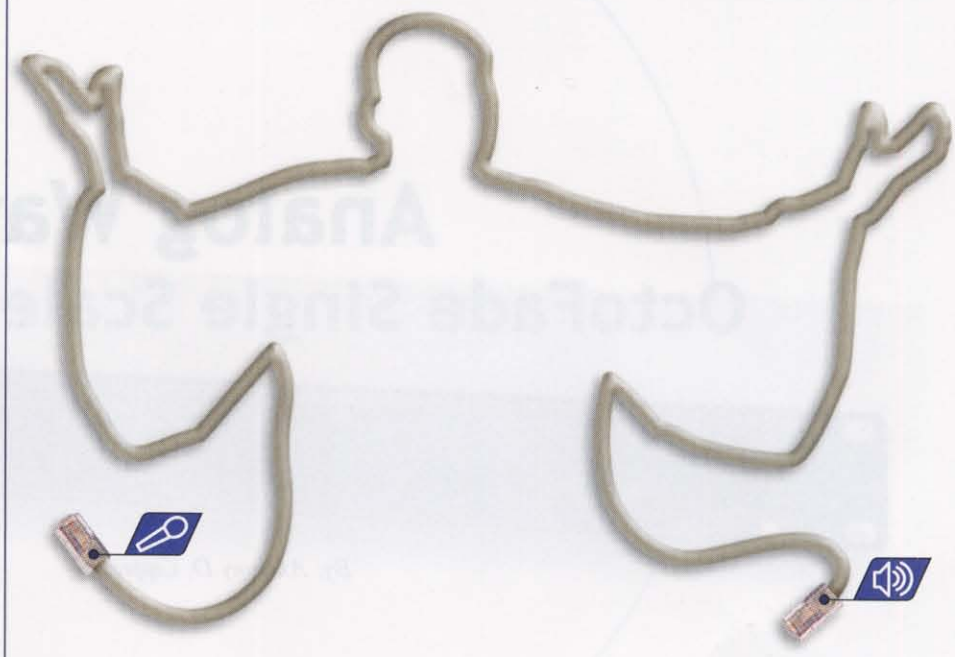
QUICK-LINK

Dial the QUICK-LINK # and reference: CHURCH PRODUCTION MAGAZINE

COMPANY:	A.C.T. Lighting
PRODUCT(S):	M.A. Lighting and Zero 88 Consoles
QUICK-LINK:	(818) 707.0884
URL:	www.actlighting.com
COMPANY:	Applied Electronics
PRODUCT(S):	LSC line of consoles
QUICK-LINK:	(800) 883-0008 or (757) 591-9371
URL:	www.appliednn.com
COMPANY:	Avolites America
PRODUCT(S):	Diamond, Sapphire, Pearl, and Azure consoles
QUICK-LINK:	(865) 938-2057
URL:	www.avoam.com
COMPANY:	Electronic Theater Controls (ETC)
PRODUCT(S):	Acclaim, Express, Expression, Insight, Obsession, and Emphasis
QUICK-LINK:	(800) 688-4116 or (608) 831-4116
URL:	www.etcconnect.com
COMPANY:	Entertainment Technology
PRODUCT(S):	Marquee 24/48
QUICK-LINK:	(214) 647-7880
URL:	www.etdimming.com
COMPANY:	High End Systems
PRODUCT(S):	Whole Hog 3, 2, 1000, 500, and Hog PC
QUICK-LINK:	(512) 836-2242
URL:	www.highend.com
COMPANY:	Horizon Control
PRODUCT(S):	Horizon lighting controller
QUICK-LINK:	(412) 422-3100
URL:	www.horizoncontrol.com
COMPANY:	Leprecon
PRODUCT(S):	LP Series of consoles
QUICK-LINK:	(810) 231-9373
URL:	www.leprecon.com
COMPANY:	Lightronics
PRODUCT(S):	TL line of consoles
QUICK-LINK:	(800) 472-8541 or (757) 486-3588
URL:	www.lightronics.com
COMPANY:	NSI Division of Leviton
PRODUCT(S):	NCM, MC, MLC, Melange, and TLC line of consoles
QUICK-LINK:	(800) 996-2276 or (503) 404-5500
URL:	www.nsicorp.com
COMPANY:	Strand Lighting
PRODUCT(S):	100, 200, 300, 301, and 500 series consoles
QUICK-LINK:	(714) 230-8200
URL:	www.strandlighting.com

— END —

Spread the word as fast as you can



Modular digital snake with only 125 microseconds latency.

Ether ES Sound

Digigram's EtherSound™ technology is the easy and affordable way to use **standard Ethernet switches and cabling** to distribute professional audio throughout your house of worship. No other technology offers such low latency with this many channels and at such a high quality. It takes only 125 microseconds to distribute up to 64 channels of 24-bit/48 kHz audio, plus bi-directional control and monitoring data, over a single standard CAT5 cable!

The set-up of a dedicated EtherSound network is as easy as plugging an Ethernet cable. Digigram's **growing range of EtherSound products** connects line and mic sources, as well as audio outputs and hard-disc based data bases to the network. **Applications: installed sound, touring, background music and paging, broadcast, logging.**

Visit the website for further details or give us a call

Circle #58 on Product Info Card

See our demo at NSCA, N° 1604

Digigram
Networking Your Sound

www.digigram.com - Tel. (703) 875 9100 - input@digigram.com

This article Copyright 2004 - 2010
by Production Media Inc. All Rights Reserved

For Subscription information go to
http://www.churchproduction.com/go.php/subscribe

To view Church Production Magazine online go to
http://www.churchproduction.com/