



Allen & Heath ME-1  
The New Personal Monitor Mixer

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## Technology resources for your shows & events.

Resource Stage News is a service publication of Horizon Solutions. This newsletter exists to assist schools, churches, theatres and amateur technicians learn and remain connected to industry leading technologies and techniques.

An extension of our Resource Stage seminars, this newsletter aims to keep you informed of new trends, pricing, specials and the latest industry news.

Have an idea for our newsletter? Contact us at 519-453-3368 or [info@resourcestage.ca](mailto:info@resourcestage.ca). We would love to hear your feedback!

Horizon Solutions is a member of



Canadian Institute for Theatre Technology

# JUNE 22<sup>nd</sup> 2013

## Get Informed Get Inspired Get Connected

This June Horizon Solutions is taking our Resource Stage Seminar series to the next level.

On June 22nd we will be hosting a day long Resource Stage Conference at The Grand Theatre in London.

Designed for amateur technicians and volunteer operators from Churches, Schools and Theatres, this event will be a great opportunity for anyone who works with audio, video or lighting systems.

Throughout this Saturday conference, you can Get Informed through seminars, Get Inspired by design sessions and Get Connected to the technology, the manufacturers and the professionals.

### GET INFORMED

Typically Horizon hosts 6-7 seminars in one year. On June 22nd - in one day - we will have a dozen seminars taught by professionals who work in the industry and have experiences we can all learn from.

### GET INSPIRED

It's one thing to see and learn about equipment and technology. It's another thing to be inspired with ways to use it in your context. Throughout the day we will host four sessions looking specifically at design concepts. Professional designers will talk about how they use technology to create amazing results.

### GET CONNECTED

We have invited over 20 of our favourite manufacturers to bring their best selling products to join us on stage at The Grand. They will showcase their best, newest and most interesting products. You and your team can get connected to the manufacturers, professionals and Horizon Solutions staff.

Everyone is welcome to this event!

Registration will soon begin at

[www.resourcestage.ca](http://www.resourcestage.ca)

For more information call 519-453-3368.

# Horizon

SOLUTIONS  
audio - lighting - video

# Theatrical Lighting going LED?

LED Lighting can be found everywhere these days. From the tail lights on your car to the lights in your kitchen. It seems that everyone wants to go LED. But does it fit in theatre and on the stage?

This question has been the subject of many a discussion over the last few years. There are many options but is there a real answer?

ETC and Chauvet have a few options they would like you to consider when you're thinking of LED and stage lighting.

They both have pros and cons and they are both worth looking at.

## ETC Source4 LED Lustr+, Daylight & Tungsten



Three fixtures with three different feature sets.

Lustr+ features colour mixing. Daylight is a bright cool white beam. Tungsten mimics the familiar colour of a standard Source4.

With great dimming, great output and 100% compatible with all Source4 accessories this is a very good alternative to a standard ellipsoidal fixture. So are there any disadvantages? Two, cost (approximately \$3000 per fixture) and intensity.

## Chauvet Ovation E-190WW Warm White Ellipsoidal



This fixture was a pleasant surprise when we had the first chance to see it. The build quality is good. It is compatible with ETC Source4 accessories and similar in output to a standard 575W ellipsoidal. It should be noted that the colour temperature is a little cooler than an incandescent bulb and the dimming although not terrible, is not nearly as good as the ETC LED fixture. Consider a price tag of \$1690, it's certainly worth considering.

# VIDEO: DIGITAL VS ANALOG

## part 3 - SO NOW WHAT DO WE DO?

continued from RSN Jan 2013

This article is a continuation from our November 2012 and January 2013 News Letter. If you'd like to read the back issues to get up to speed, let us know and we'll get you copies.

If you can't beat them, join them - Go Digital!

Our recommendation is that our clients choose a digital signal transport solution. This means that all analog signals are converted from analog to digital and all digital signals are passed along properly to the display devices. When implemented with a switcher scaler, this sort of system works very well.

If you'd like more information on how to do this, please contact Horizon Solutions. We can certainly explain this further.

*Although no maximum length has been specified in the original spec, high speed Category2 HDMI Cables will typically fail at distances over 15m (49').*

### Breaking the Digital Signal Distance Limitations

As stated in previous Resource Stage News articles, digital signals have distance limitations. The issue is fairly simple. Although the signal is digital it is sent over an analog hardware device, typically copper. Like any signal, it degrades as it gets further from the source. In Analog, if an image is sent over a long distance, the image becomes less crisp and over much longer distances the image becomes "blobs of colour". The difference with Digital is that if the display device can decipher the ones and zeros making up the digital image then the image will look great. If the display cannot "lock on to the signal", it doesn't produce any image. (Sometimes you can get pixilation as the image changes and less information is being sent but it's not a usable image.)

Considering most of these digital signal systems are primarily designed to be used for home theatre applications, there is little need for the engineers to develop long distance signals.

Out of necessity, the professional AV industry has developed ways to take DVI, HDMI, DisplayPort and other digital video signals and send them over longer distances, typically reaching as far as 100m from the source at maximum resolution. There are a few different ways to achieve this, however it is our experience that the most reliable solution, balanced with the most future proofing, and most reasonable price, is to send the signal over a specialty Shielded Twisted Pair CAT6 cable.



This Kramer PT-571 HDMI over STP CAT6 Transmitter can achieve full 3D 1080p resolution at 100m from the source. The matching PT-572+ Receiver is the same size, making it easy to hide behind a TV or on a projector mount.

This required a transmitter at the source and a receiver at the display device. The cables need to be terminated by trained technicians, but when installed and commissioned properly, the system works extremely well with very few issues or risk of failure.

(Note: Longer distances can be achieved over fiber optics at a fairly high cost.)

Video systems are the fastest changing segment of our industry. At Horizon Solutions our philosophy is to not provide the cheapest, easiest answer to "get the sale", but to provide our clients with information so they can choose the best solution for their needs today and tomorrow.

# RENTAL solutions

Contact Paul Walker at 519-453-3368  
or paul@horizonsolutions.org



## COMPACT AUDIO SYSTEM

Rent a compact portable sound system starting at \$40 /day  
\$80 /week

## IN-EAR MONITORS Rent or Demo

Rent a Sennheiser EW300 IEM System  
\$30 /day  
\$60 /week



## LASER LIGHTING EFFECT

Add some effects to your next school or youth event!  
\$25 /day  
\$50 /week



## CAPTURE HIGH QUALITY RECORDINGS

Rent an AKG or AT Professional Recording Microphone for \$15 / day or \$30 / week or a basic Shure USB mic for \$12 / week!



## HD Video Mixing for your special event!

Rent a Roland V-40HD  
\$100 /day  
\$200 /week

## COMPACT DIGITAL AUDIO MIXER /w iPad Control

Rent a Roland M200i /w S1608 Digital Snake  
\$150 /day \$300 /week



## LIGHTING CONTROL

Rent a Jands StageCL LED / Dimmer Console  
\$35 /day \$70 /week



Yes! 

We can deliver, setup & pickup!

(delivery, setup & pickup charges are quoted per rental)

\* rental equipment may not be exactly as shown

## Technology Tips... Did you know?

### BUZZZZZZ from your computer.

Get rid of the noisy laptop buzz in your sound system.

We have talked about this situation before. You have a computer plugged into your audio system with a cable and there seems to be a buzz in the system.

You've tried different cables and it doesn't seem to go away. So what's the solution? Well the best solution we have is to use a device which will provide you isolation through a transformer, balance the signal and provide you with a ground lift switch if required.

There are a few options to choose from and they will all do the trick. We like the Rapco LTI-GLBLOX for a "cheap and dirty" solution at under \$60. And for more discerning ears we recommend going with the Radial Engineering Pro AV1 or Pro AV2 Audio/Video DI. They cost more money but they sound great!



1-800-698-8796

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## GEAR THAT'S GOT OUR ATTENTION

### PROTECT YOUR INVESTMENT SurgeX SA15 Pro Surge Protection



If you own electronics that you can't afford to replace if they get hit by an electrical surge or spike - you need a SurgeX.

If you need the surge protection to protect your equipment over and over again, everyday, no exceptions, no degradations to the protection circuit and with an 11 year warranty - you need a SurgeX.

If you've purchased the over priced power bar from the big box store and have had it fail for little or no reason - you needed a SurgeX... and now you should buy one.

stand alone devices from  
**\$259.00**

rackmount devices from  
**\$579.00**

### Audio Technica ES915ML Microline Premium Gooseneck Mics



Those who know Horizon know that we will always point our clients to the best quality products for their money.

The AT ES915ML is not a cheap gooseneck mic. But this microphone is the epitome of "You get what you pay for." When you require your system to have great sound from a podium microphone, this is the mic.

**\$391.00** 18" Gooseneck

**\$417.00** 21" Gooseneck  
(other sizes available)

RESOURCE STAGE  
THE CONFERENCE  
**JUN 22  
2013**  
THE GRAND THEATRE  
LONDON, ONT

www.resourcestage.ca

## 2012/13 Seminars

LONDON ONTARIO

Mar 19th - Large Image Projection

Mar 26th - Allen & Heath GLD DEMO NIGHT

JUN 22 - RESOURCE STAGE - THE CONFERENCE

\* 16 Seminar Sessions \*  
\* over 20 manufacturers represented \*  
[www.resourcestage.ca](http://www.resourcestage.ca)  
for more info

sign up at [www.resourcestage.ca](http://www.resourcestage.ca) to receive  
emails about the next Resource Stage Seminar  
\$5 @ the door - no registration required

**RESOURCE  
STAGE**

Get connected to industry leading  
technology and techniques.

Audio, Lighting & Video  
Seminars for Amateur  
Technicians

Resource Stage seminars are an  
opportunity for the part time technician,  
teacher or theatre enthusiast who wants  
to learn more about the technical  
aspects of shows and events.

We encourage all participants to come  
with their questions and real life  
experiences to add to the discussion  
forum.

Each month we discuss and explore the  
latest technology and techniques as  
presented by industry professionals.



Audio Technica AT3000  
BP892TH Wireless Kit  
**\$699.99!**



Radial ProD2 Stereo DI  
REGULAR - \$169.65 each  
2+ \$125 each!



Whirlwind IMP2 DI Box  
REGULAR - \$49.41 each  
2+ \$42 each!



QSC ISA450  
Professional Grade  
Installation Amplifier 3RU  
260W @ 80hm 2 Ch  
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A GREAT MIC  
FOR CHOIRS,  
INSTRUMENTS  
& PIANOS!



Audio Technica AT4041  
Pencil Condenser Mic  
**\$299.99**



Allen & Heath  
ME1 Personal  
Monitor Mixer  
possibly the most  
powerful personal monitor  
mixer on the market  
100% Aviom Compatible  
**\$649.00**



Steel & Glass Gobos  
Project images on walls, floors,  
projection screens etc  
**\$15.60 Steel Gobos**  
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Call for glass gobo pricing

**Horizon**

SOLUTIONS  
audio - lighting - video

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\*\* Special pricing subject to product availability \*\*