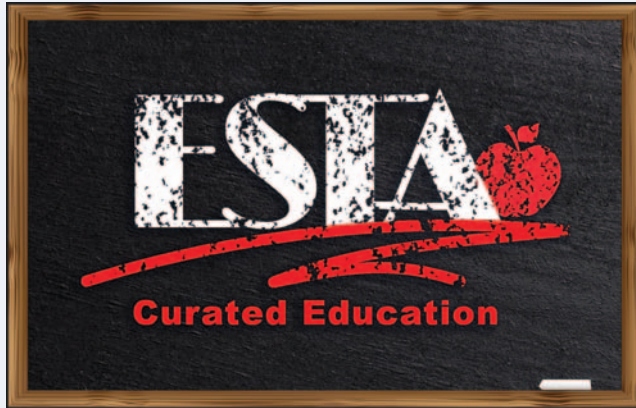


Register for The NAMM Show and these ESTA curated education sessions are free



ESTA has curated another stellar lineup of quality technical education at **The 2023 NAMM Show**.

Tracks of focus are **Lighting & Electrics, Lighting Networking, Rigging, and Safety**. This is an opportunity to learn from some of the industries' best and brightest, and *all* sessions are *free* with your registration. NAMM and ESTA are committed to strengthening our industries by making education and training accessible to all. Plus, most ESTA sessions offer ETCP renewal credits. All you need to do is register for The NAMM Show and then show up!

All ESTA curated sessions will be located at the Anaheim Convention Center in room 203A.

**THURSDAY, APRIL 13TH**

### Powering your Festival Stage: Power Distribution for Outdoor Live Events

Presenters: Michael Matthews and Erin Giblin  
Thursday 9:00 – 10:30 a.m.  
ETCP renewal credits 1.5

Into the great wide open! Providing power for outdoor events adds a set of challenges and hazards. This seminar will look at power distribution in the outdoor environment, the challenges it poses, and the necessary safety measures to mitigate the additional hazards involved. Topics will include portable generators, weather ratings for equipment and cable, codes and standards, and emergency action plans.

### Keeping it Clean: Clean Power Systems for Audio, Video, and Lighting Systems

Presenters: Richard Cadena and Alan Rowe  
Thursday 10:30 a.m. – 12:00 p.m.  
ETCP renewal credits 1.5

What is "clean power" and what is "dirty power?" How does dirty power affect live audio, video, and lighting, and how do we know if we have clean power, dirty power, or something in between? These questions and more are answered in this session by exploring the sources of and solutions for hums, buzzes, pops, distortion, and more.

### Electronics for Guitars

Presenter: Michael Matthews  
Thursday 12:00 – 1:00 p.m.

Take a walk on the wire side. This seminar introduces the theory behind electric guitars and explores the tools and techniques involved in guitar electronics. Learn troubleshooting techniques, wiring basics, and modifications that can change the tone of your tune.

### The Importance and the Methodologies of Truss Inspection

Presenter: Adrian Forbes-Black  
Thursday 1:00 – 4:00 p.m.  
ETCP renewal credits 1.5

See <https://esta.org/events/namm/namm.html> for more information about this ESTA Education at NAMM session.

### "To Sleep, Perchance to Dream:" The Harmful Effects of Sleep Deprivation

Presenters: Eddie Raymond and Bryan Huneycutt  
Thursday 4:00 – 5:00 p.m.  
ETCP renewal credit 1

In his book, *Why We Sleep*, Dr. Matthew Walker explores in detail the myriad of benefits to body and brain derived while we sleep, and the deleterious effects of not getting a good night's sleep. In an industry that regularly demands long and irregular hours of its workers, how much harm are we really doing to ourselves?

Eddie Raymond and Bryan Huneycutt, industry safety professionals, discuss the ramifications of our shared lack of proper rest.

### What Does RDM Buy Us?

Presenter: Milton Davis  
Thursday 5:00 – 6:00 p.m.  
ETCP renewal credit 1

Most lighting professionals are aware of the Remote Device Management protocol (RDM), but the true capabilities of the standard are not well understood. Milton Davis will provide an introduction to RDM and the infrastructure required to support it. He will then show how RDM can be used in practical applications to meet the goal of "being faster than a person with a ladder" to accomplish tasks in entertainment lighting venues. Capabilities for the most recent extensions of the RDM protocol will also be covered.

**FRIDAY, APRIL 14TH**

**Keep the rhythm going! Electrical Safety for Live Events**

Presenters: Richard Cadena, Erin Giblin, and Alan Rowe  
 Friday 9:00 – 10:30 a.m.  
 ETCP renewal credits 1.5

If all the world is a stage, we need fewer stage electrocutions! Fatal stage electrocutions occur about every other year, and near-fatal stage shock occurs far more often. What are the causes of these accidents, and, more importantly, what can we do to prevent them in the future? Very often the problem is preventable if you know what to look for and how to resolve electrical issues in a safe manner.

**On the Road: Portable Power Systems for Audio Systems**

Presenter: Michael Matthews  
 Friday 10:30 a.m. – 12:00 p.m.  
 ETCP renewal credits 1.5

The ins and outs of powering up your rig. Providing power for audio systems in the entertainment industry is a particular thing. From source to speaker, this seminar looks at how to properly size and distribute your power to ensure your sound comes out clean. Topics will include sourcing, cabling, phase balancing, techniques for mitigating hum and noise.

**Industrial Rope Access – A Means to an End or the Bus We Use to Take to Work?**

Presenter: Ian Bevan  
 Friday 1:00 – 4:00 p.m.  
 ETCP renewal credits 1.5

A discussion on the history behind rope access and the growth and development of a sustained, safe, and economical alternative to traditional fall protection. Led by Ian Bevan, Senior Rigging Manager/ Rope Access Program Administrator for Disney Live Entertainment. Ian is also a SPRAT certified Level 3 Rope Access Technician, a SPRAT certified Evaluator, and previously certified as an IRATA Level 3 Rope Access Technician.

Topics include, but not limited to: History of difficult access and worker safety, role of OSHA and difficult access, governing bodies on worker protection, industry consensus bodies involved with rope access, relevant work at height standards, fall protection, rope access, and requirements for a safe rope access job.

**Setting the (ANSI) Standard for Safety in Live Events**

Presenter: Erin Grabe  
 Friday 4:00 – 5:00 p.m.  
 ETCP renewal credits 0.5

American National Standards from ESTA's Technical Standards Program play an integral role in keeping people safe from harm at live events. No matter what kind of event or how you're involved with it, and whether or not you've ever given standards any thought, you're familiar with them, you use them regularly, or you help write them, don't miss this session! Come to listen and ask questions about what standards are, how they're written, and how you should use them. Even if you don't attend, you at least know where to get the standards by reading the title of this session.

**Controlling Color with LED Lighting**

Presenter: Javid Butler and Shawn Silverman  
 Friday 5:00 – 6:00 p.m.  
 ETCP renewal credits 0.5

LED lighting is the future of entertainment lighting, but it brings new challenges for working with scenery, costumes, and makeup. This session will cover how to select LED fixtures that will work well together and how to avoid issues such as color shift across a set that can distract from the show. Discussion will also include how to set up controls to get the best color performance.

**SATURDAY, APRIL 15TH**

**Intro to Rigging Math**

Presenter: Eric Rouse  
 Saturday 9:00 – 11:00 a.m.  
 ETCP renewal credits 2

Many riggers fear the math that is oftentimes required to calculate loads for their rigging systems. Ignoring the problem isn't the solution! This session will delve into the math and concepts that riggers use to determine loads on entertainment structures. We will calculate point loads and uniform loads and look at how they create different reactions on structures. We will discuss the concepts used to determine bridle lengths and learn how to calculate load distribution and line tension. Last but not least, we will discuss the concept of indeterminate structures and how it should affect our thinking when designing the rigging. This is a great class for those wanting to brush up on material for the ETCP Rigging exam.

**Wireless DMX512**

Presenter: Paul Kleissler  
 Saturday 11:00 a.m. – 12:00 p.m.  
 ETCP renewal credits 0.5

Join lighting expert Paul Kleissler, Head of Engineering for City Theatrical, Inc., for an in-depth exploration of the DMX512 Wireless Control System. Learn the many uses for wireless DMX512 distribution and how you can use it to simplify your lighting installation. Paul will also discuss the basics of wireless DMX, the different approaches to system design, and the capabilities and capacity of the technology.

**PoE for Entertainment Environments**

Presenters: Chad Jones and Erik Augustine  
 Saturday 12:00 – 1:00 p.m.  
 ETCP renewal credits 0.5

Power over Ethernet (PoE) was created to allow telephones and video cameras to operate without the need for a local power feed. This ability has been adopted by numerous devices in the entertainment industry. PoE allows a single cable to be used for data and power to control stations, data interfaces, audio interfaces, and even lighting fixtures. Chad Jones and Erik Augustine will explore PoE background, limitations, and applications unique to our unique situations.

### Networking Basics

Presenter: Javid Butler and Shawn Silverman

Saturday 1:00 – 2:00 p.m.

ETCP renewal credits 0.5

In this session, Javid Butler and Shawn Silverman will introduce basic networking concepts needed for the entertainment environments. They will cover cabling, hardware, and configuration.

### Advanced Ethernet Networking for Entertainment

Presenter: Jason Potterf

Saturday 2:00 – 3:00 p.m.

ETCP renewal credits 0.5

Networking expert Jason Potterf will explore advanced networking topics which allow entertainment control systems to operate over large areas such as theme parks. Latency and traffic priority are concerns in such situations. Operation from remote control via the Internet can also introduce design challenges.

### Production Safety: Integrating Public, Audience, and Worker Safety into Your Plans

Presenter: Kent Jorgensen

Saturday 3:00 – 5:00 p.m.

ETCP renewal credits 2

For years now, safety in the entertainment industry has been moving up the list of priorities for production companies. Whether a large

concert event or a small local production, coordinating the safety plans for the production aren't just about the public and the audience, but must include the health and safety planning for the workers. This includes how the workers fit in with the execution of the safety plan, and how employers and contractors fulfil their worker health and safety obligations.

For the most current schedule of ESTA-curated education at NAMM, visit [www.esta.org/namm](http://www.esta.org/namm). All ESTA-curated session will be located at the Anaheim Convention Center in room 203A. Your badge gives you free admission to all the ESTA-curated education sessions and *nearly* all offer ETCP Certification renewal credits! Learn more about ESTA at NAMM events on our home page [www.esta.org](http://www.esta.org). Visit the ESTA booth #12127 in the Event Technology Hall A—stop by and say hello! See you soon in Anaheim.

**It just doesn't get any better than *free* education! Special thanks to all the presenters and volunteers as well as ESTA's partners NAMM and *Lighting&Sound America/PLASA*.**