

AES PNW Section Zoom Chatlog
2026-March-31, 6:00pm PDT
Open Sound Control with Michael Ashton

2026-03-31 17:56:30 From Suresh to Everyone:

Good morning I'm Suresh from INdia doing Lecturer in Sound
Recording & Sound Engineering @ Tamil Nadu Government MGR Film &
Television Institute

Jess Berg, Michael Ashton: 🙌

Jess Berg: 🙌

2026-03-31 17:56:38 From Suresh to Everyone:

<https://www.filminstitute.tn.gov.in/en>

2026-03-31 17:59:27 From Quinn Ouyang to Everyone:

Sorry, I'm not in a mic-able place at the moment—fine if I just
listen-in in the meantime?

2026-03-31 18:02:28 From Matthew Sutton to Everyone:

Website updated

Jess Berg: ❤️

2026-03-31 18:07:31 From Michael Ashton to Everyone:

Also a Tech grad, nice to see you here!

Elijah Rabinovich: ❤️

2026-03-31 18:07:38 From Stephen (Steven) DeVore to Everyone:

Having phone power problems. Might not be able to fully attend.

2026-03-31 18:08:09 From Stephen (Steven) DeVore to Everyone:

StephenDeVore.com

2026-03-31 18:09:56 From Quinn Ouyang to Everyone:

Quinn here! (he/him) Studied in Illinois, background in programming
and computer music (MIR, MLSP)

Michael Ashton, Michelle Daniels: 🙌

2026-03-31 18:10:07 From Quinn Ouyang to Everyone:

oh, from Seattle

2026-03-31 18:10:14 From Jayney Wallick to Everyone:

Welcome Stephen. I hope your tech holds out!

Stephen (Steven) DeVore, Stephen Graham: 💙

2026-03-31 18:10:28 From Michael Ashton to Everyone:

Replying to "Quinn here! (he/him) Studied in Illinois,
backgrou...":

U of Illinois?

2026-03-31 18:11:52 From Stephen (Steven) DeVore to Everyone:

Replying to "Having phone power problems. Might not be able to
...":

206-288-3881 text first. Stephen DeVore

2026-03-31 18:12:33 From Stephen (Steven) DeVore to Everyone:
Replying to "StephenDeVore.com":
206-288-3881 text first. Stephen DeVore

2026-03-31 18:13:21 From Stephen (Steven) DeVore to Everyone:
Replying to "Quinn here! (he/him) Studied in Illinois, backgrou...":
I took a computer music course in college. :-D

2026-03-31 18:13:43 From Quinn Ouyang to Everyone:
Replying to "Quinn here! (he/him) Studied in Illinois, backgrou...":
yeah uofi/uiuc!

2026-03-31 18:14:06 From Stephen Graham to Everyone:
Replying to "Welcome Stephen. I hope your tech holds out!":
Thanks Jayney, ISP has been a bit unreliable recently.

2026-03-31 18:15:18 From Jayney Wallick to Everyone:
Replying to "Welcome Stephen. I hope your tech holds out!":
Too bad. I hope it improves.

2026-03-31 18:16:33 From Suresh to Everyone:
Yes

2026-03-31 18:17:36 From Jess Berg to Everyone:
Friendly reminder to please turn your video off during the presentation - thanks!

2026-03-31 18:18:32 From JW Newson to Everyone:
Lets geek out! :)
Jess Berg: 🎉
Kevin: 😊

2026-03-31 18:21:57 From Stephen (Steven) DeVore to Everyone:
MIDI: Pedal (sustain). More "pedal".

2026-03-31 18:23:55 From Stephen (Steven) DeVore to Everyone:
MIDI 1.0 - only 8 bits.

2026-03-31 18:39:04 From Stephen (Steven) DeVore to Everyone:
Used Max at the UW in Spring 1993.
Jess Berg: 🙌

2026-03-31 18:42:46 From Stephen Graham to Everyone:
Replying to "Used Max at the UW in Spring 1993.":
Opcode MAX on Mac?

2026-03-31 18:52:21 From Stephen (Steven) DeVore to Everyone:
Lots of acronyms and non-beginner terms. Edit: I will include some meanings.

2026-03-31 18:54:29 From Stephen (Steven) DeVore to Everyone:
"OSC" might have confused beginning MIDI folks, as osc. could mean (synthesizer) oscillator—a thing that made the synth make its sound.

2026-03-31 19:02:35 From Stephen (Steven) DeVore to Everyone:
DACs - presumably means digital-to-analog converter.

CVs - presumably means control voltage, what could control a synth like a message:

"an analog control signal used by synthesizers to control things like:

pitch
filter cutoff
volume
modulation"

2026-03-31 19:04:48 From Jess Berg to Everyone:
<https://www.soundonsound.com/news/birth-moog-one>

Kevin: 🍑

Stephen (Steven) DeVore: ❤️

2026-03-31 19:05:07 From Jess Berg to Everyone:

^ Gordon Reid article that Michael mentioned 🤖

Joel Wetzell, Stephen Graham: 🍑

Stephen (Steven) DeVore: ❤️

2026-03-31 19:05:13 From Stephen (Steven) DeVore to Everyone:
"In MIDI, CCs means Control Changes or Control Change messages. These are MIDI messages used to control parameters such as:

mod wheel
volume
pan
expression
sustain pedal"

2026-03-31 19:07:41 From Stephen (Steven) DeVore to Everyone:
CPU-chip-related types: ARM, RISC....

2026-03-31 19:10:31 From Stephen (Steven) DeVore to Everyone:

MIDI:
"Each CC has a number. For example:
CC 1 = Modulation wheel
CC 7 = Channel volume
CC 10 = Pan
CC 11 = Expression
CC 64 = Sustain pedal"

2026-03-31 19:11:46 From Stephen (Steven) DeVore to Everyone:
I am just adding some meanings for some of the beginners.

Kevin: 🍑

2026-03-31 19:11:59 From Joel Wetzell to Everyone:

And there's barely an OSC 1.1 🤖

2026-03-31 19:13:38 From Stephen (Steven) DeVore to Everyone:
DIN-5, the original MIDI connector: 5-pin DIN.

2026-03-31 19:14:20 From Joel Wetzell to Everyone:
Quote from the 1997 publication.

"We assume that Open SoundControl will be transmitted on a system with a bandwidth in the 10+ megabit/sec range. MIDI's bandwidth, by contrast, is only 31.25 kilobit/sec, roughly 300 times slower. Therefore, our design is not preoccupied with squeezing musical information into the minimum number of bytes."

Jess Berg: 👍

Stephen (Steven) DeVore: 🤖

2026-03-31 19:18:31 From Joel Wetzell to Everyone:
Yamaha mixer SysEx nightmares tonight.
Stephen (Steven) DeVore: 🤖

2026-03-31 19:18:40 From Stephen (Steven) DeVore to Everyone:
"SysEx means System Exclusive.
It is a special kind of MIDI message used for device-specific data."

2026-03-31 19:20:48 From Jess Berg to Everyone:
<https://opensoundcontrol.stanford.edu/>
Stephen (Steven) DeVore: ❤️

2026-03-31 19:21:10 From Stephen (Steven) DeVore to Everyone:
I just added some meanings for some of the beginners.

2026-03-31 19:23:42 From Dave Quick to Everyone:
Juce has OSC.
Jess Berg: 👍

2026-03-31 19:26:45 From JW Newson to Everyone:
Greetings! Thank you for your time and mind ! aIs there a Midi to OSC converter that you would reccomend that translates network OSC messages into MIDI messages?
Jess Berg: 👍

2026-03-31 19:28:15 From Stephen Graham to Everyone:
Oscpack handles bundles nicely.
<https://github.com/RossBencina/oscpack>
Stephen (Steven) DeVore: 🤖

2026-03-31 19:28:49 From JW Newson to Everyone:
I currently use a vintage roland xp-60 to create our own sounds and in a world of patch and play we strive on keeping the creative process

scientific and original. thank you once again for your time and your mind!

Jess Berg: 👍

2026-03-31 19:29:10 From Suresh to Everyone:

Thanks you bcs this session give me an introduction to OSC. Thanks Michael

Jess Berg: 👍

2026-03-31 19:33:39 From Stephen (Steven) DeVore to Everyone:

If you were to give a Marketing message for OSC, what would you say to get audio folks and musicians to be excited? What is it being used for? (plus vs. Dante, or lighting protocols, MIDI 2.0, etc.) "Marketing" message?

2026-03-31 19:37:32 From Elijah Rabinovich to Everyone:

My only experience with OSC before this talk is QLab and ETC boards in a theatre setting for sharing data with each other.

Stephen (Steven) DeVore: 👍

2026-03-31 19:38:30 From Chris Myring to Everyone:

https://en.wikipedia.org/wiki/DIN_connector

Stephen (Steven) DeVore: 👍

2026-03-31 19:38:55 From Joel Wetzell to Everyone:

ETC has an Open Source repo that supports converting OSC <> MIDI and other interesting protocols <https://github.com/ETCLabs/OSCRouter>

JW Newson: 👍

2026-03-31 19:39:03 From Stephen Graham to Everyone:

TouchOSC handles OSC to MIDI and vice versa really well and you can build UIs there too.

JW Newson: 👍

Stephen (Steven) DeVore: 🤖

2026-03-31 19:39:21 From Jess Berg to Everyone:

<https://www.ableton.com/en/live/max-for-live/>

Stephen (Steven) DeVore: ❤️

2026-03-31 19:39:27 From Joel Wetzell to Everyone:

PD = PureData

JW Newson: 👍

Stephen (Steven) DeVore: ❤️

2026-03-31 19:39:50 From Stephen (Steven) DeVore to Everyone:

Replying to "PD = PureData":

A programming language?

2026-03-31 19:39:54 From Jess Berg to Everyone:

<https://www.ableton.com/en/blog/make-your-own-max-live-devices/>

JW Newson: 👍

Stephen (Steven) DeVore: 🙄

2026-03-31 19:39:57 From Joel Wetzell to Everyone:

Replying to "PD = PureData":

Visual yes

Stephen (Steven) DeVore: 👍

2026-03-31 19:40:17 From Joel Wetzell to Everyone:

Replying to "PD = PureData":

very audio oriented as well

2026-03-31 19:42:52 From JW Newson to Everyone:

Thank you all!

Jess Berg: ❤️

2026-03-31 19:43:54 From Stephen (Steven) DeVore to Everyone:

Max was even cool in 1993!

Barry McCord: 👍

2026-03-31 19:44:48 From Joel Wetzell to Everyone:

A good PD environment <https://plugdata.org/>

Stephen (Steven) DeVore: 🙄

Stephen (Steven) DeVore: 🙄

2026-03-31 19:45:47 From Stephen (Steven) DeVore to Everyone:

No phone save chat... :(

Barry McCord: 👍

2026-03-31 19:46:14 From JW Newson to Everyone:

Peace...

2026-03-31 19:46:58 From Don Hartley, CTS to Everyone:

Thank you. Have a nice evening!

Jess Berg: ❤️

Jayne Wallick: 👍

2026-03-31 19:48:17 From Stephen (Steven) DeVore to Everyone:

Replying to "No phone save chat... :(":

conferencecontact@yahoo.com

2026-03-31 19:48:30 From Chris Myring to Everyone:

Thank you for the presentation Michael. If someone comes in with a repair I will know what they are talking about!

Stephen (Steven) DeVore: ❤️

Stephen (Steven) DeVore: 😄

2026-03-31 19:48:38 From Stephen (Steven) DeVore to Everyone:

Replying to "No phone save chat... :(":

If someone can email me the Chat?

2026-03-31 19:49:28 From Stephen (Steven) DeVore to Everyone:

^ If someone can email me the Chat?

2026-03-31 19:51:54 From Chris Myring to Everyone:
Wikipedia - right or wrong?
https://en.wikipedia.org/wiki/Open_Sound_Control

2026-03-31 20:02:06 From Stephen (Steven) DeVore to Everyone:
5-pin DIN connector PIN numbers
202603312002020000.png

2026-03-31 20:03:30 From Stephen (Steven) DeVore to Everyone:
"5-pin DIN MIDI cable plugged in a socket"
<https://en.wikipedia.org/wiki/MIDI>
202603312003270000.jpg

2026-03-31 20:03:46 From Jess Berg to Everyone:
Did it become this:
https://ocaalliance.com/resources/standards__specifications/

2026-03-31 20:08:47 From Stephen Graham to Everyone:
FYI Supercollider uses oscpack

2026-03-31 20:09:26 From Joel Wetzell to Everyone:
<https://aes.org/standards/models/>

2026-03-31 20:10:09 From Jayney Wallick to Everyone:
The link above yields a 404 error for me, just FYI.
Stephen (Steven) DeVore: 👍

2026-03-31 20:10:15 From Gary Louie-PNW Secretary to Everyone:
I know the AES website has had a lot of problems as it has had to make many transitions. You should complain if things are really missing that should be there. Links to the old website almost never work anymore and get 404.

Jess Berg: 👍

Stephen (Steven) DeVore: 🙄

2026-03-31 20:10:28 From Joel Wetzell to Everyone:
Screenshot 2026-03-31 at 10.09.58 PM.png

2026-03-31 20:10:35 From Stephen (Steven) DeVore to Everyone:
Me also

2026-03-31 20:11:30 From Dave Quick to Everyone:
Thanks Michael Ashton! Tell us about your company.
Stephen (Steven) DeVore: ❤️
Stephen (Steven) DeVore: 🙄

2026-03-31 20:11:39 From Joel Wetzell to Everyone:
That link is inside the AES70 spec PDF as where to look for the built-in classes.

2026-03-31 20:12:08 From Stephen (Steven) DeVore to Everyone:
Replying to "FYI Supercollider uses oscpack":

What is Supercollider?

2026-03-31 20:12:37 From Joel Wetzell to Everyone:
Replying to "FYI Supercollider uses oscpack":
<https://supercollider.github.io/>

2026-03-31 20:12:41 From Stephen (Steven) DeVore to Everyone:
I had like maybe 14 (or more?) physical synths. lol
Jess Berg: 👍

2026-03-31 20:13:37 From Jess Berg to Everyone:
Replying to "Thanks Michael Ashton! Tell us about your company.":
<https://ashton-research.com/>

2026-03-31 20:16:39 From Stephen (Steven) DeVore to Everyone:
AES72... (?)

2026-03-31 20:17:15 From Elijah Rabinovich to Everyone:
What would the channel count on one cat8 look like?

2026-03-31 20:17:52 From Gary Louie-PNW Secretary to Everyone:
I can get the AES 70 docs from the new website "standards store"
and as a member can download for free. There are likely paywall-limits if
not a members. I did a little search to here:
https://aes.org/publications/standards-store/?action=standardsSearch&search=AES70-&date_from=&date_to=&standards=&records=10
Jess Berg, Stephen (Steven) DeVore: 👍
Stephen (Steven) DeVore: 🤖

2026-03-31 20:22:12 From Elijah Rabinovich to Everyone:
This is a relatively off-topic question but I'm still a rather
large novice when it comes to the actual nitty gritty of sound
engineering and the terminology in the field. I was reading through the
Yamaha Sound Reinforcement Handbook but I found that a lot of the
material discussed was already past my understanding.

What resources would any of you all recommend for learning more to
aid my understanding and knowledge?

Stephen (Steven) DeVore: ❤️

2026-03-31 20:23:41 From Jess Berg to Everyone:
Replying to "This is a relatively off-topic question but I'm
st...":
For live sound? Or recording studios? Both?
Stephen (Steven) DeVore: ❤️

2026-03-31 20:24:04 From Jess Berg to Everyone:
Replying to "This is a relatively off-topic question but I'm
st...":
Live Sound Reinforcement, Bestseller Edition (Hardcover &
DVD) Hardcover - December 30, 2004
by Scott Hunter Stark

2026-03-31 20:25:14 From Stephen (Steven) DeVore to Everyone:
Replying to "This is a relatively off-topic question but I'm
st...":
That focuses on Live sound. Do you want Studio? Building? Fixing?

2026-03-31 20:25:37 From Joel Wetzell to Everyone:
<https://github.com/omriharel/deej>

2026-03-31 20:25:49 From Jess Berg to Everyone:
Replying to "This is a relatively off-topic question but I'm
st...":
Modern Recording Techniques: A Practical Guide to Modern Music
Production (Audio Engineering Society Presents) 10th Edition
by David Miles Huber

2026-03-31 20:26:45 From Joel Wetzell to Everyone:
This is the gateway to companies that make things like this. Which
does speak OSC! <https://www.teamsound.nyc/store/pilot>

2026-03-31 20:27:02 From Jess Berg to Everyone:
Replying to "This is a relatively off-topic question but I'm
st...":
Professional Microphone Techniques Paperback - December 1, 1998
by David Miles-Huber

2026-03-31 20:27:22 From Stephen (Steven) DeVore to Everyone:
Replying to "This is a relatively off-topic question but I'm
st...":
"Modern Recording Techniques is the bestselling, authoritative
guide to sound and music recording." It was like a Bible but dense.

2026-03-31 20:28:18 From Jess Berg to Everyone:
Replying to "This is a relatively off-topic question but I'm
st...":
The Mixing Engineer's Handbook: 6th Edition Paperback - October 6,
2025
by Bobby Owsinski
Stephen (Steven) DeVore: 
Stephen (Steven) DeVore: 

2026-03-31 20:28:25 From Stephen (Steven) DeVore to Everyone:
Replying to "This is a relatively off-topic question but I'm
st...":
If you were in Seattle, I just attended two series of classes: Live
and Recording.

2026-03-31 20:28:45 From Jess Berg to Everyone:
Replying to "This is a relatively off-topic question but I'm
st...":
Confessions of a Record Producer: How to Survive the Scams and
Shams of the Music Business Paperback - March 1, 2016
by Moses Avalon

Stephen (Steven) DeVore: 🤖

2026-03-31 20:29:19 From Chris Myring to Everyone:
For DIY builds, GroupDIY is a useful forum.

2026-03-31 20:29:25 From Stephen (Steven) DeVore to Everyone:
Replying to "This is a relatively off-topic question but I'm st...":
I got much of my gear from Sweetwater. Some good info. A bit sell-y, less so than some others.

2026-03-31 20:30:32 From Chris Myring to Everyone:
<https://groupdiy.com/>

2026-03-31 20:30:49 From Jess Berg to Everyone:
Replying to "This is a relatively off-topic question but I'm st...":
All You Need to Know About the Music Business: Eleventh Edition Hardcover - October 24, 2023
by Donald S. Passman

2026-03-31 20:31:02 From Stephen (Steven) DeVore to Everyone:
Replying to "This is a relatively off-topic question but I'm st...":
Good Intensive ("immersive") instruction was at The RecW (not cheap). I got 4 Certificates there.

2026-03-31 20:33:17 From Stephen (Steven) DeVore to Everyone:
Replying to "This is a relatively off-topic question but I'm st...":
Terminology takes a while. I LOVED Glossaries.

2026-03-31 20:35:07 From Stephen (Steven) DeVore to Everyone:
Replying to "This is a relatively off-topic question but I'm st...":
Radio Shack had a great beginner book on Electronics. I had it and used it long ago.

2026-03-31 20:35:21 From Michael Ashton to Everyone:
<https://a.co/d/0eKqtPvH>

2026-03-31 20:35:34 From Chris Myring to Everyone:
Doug Self's book is good too - not much math!

2026-03-31 20:35:45 From Joel Wetzell to Everyone:
https://kolegite.com/EE_library/books_and_lectures/%D0%95%D0%BB%D0%B5%D0%BA%D1%82%D1%80%D0%BE%D0%BD%D0%B8%D0%BA%D0%B0/_The%20Art%20of%20Electronics%203rd%20ed%20%5B2015%5D.pdf

2026-03-31 20:36:53 From Michael Ashton to Everyone:
<https://a.co/d/06FHw0U1>

2026-03-31 20:37:58 From Chris Myring to Everyone:
<http://www.douglas-self.com/ampins/books/ssad3.htm>

Jess Berg: 🌈

2026-03-31 20:40:06 From Michael Ashton to Everyone:

I second Chris' recommendation for Doug Self's book. Required for anybody designing audio equipment.

Stephen (Steven) DeVore: 🤖

2026-03-31 20:43:47 From Stephen (Steven) DeVore to Everyone:

Behringer (M or X)32 is a famous Live board.

2026-03-31 20:44:18 From Stephen (Steven) DeVore to Everyone:

Behringer had a good compressor called Composer.

2026-03-31 20:44:49 From Stephen (Steven) DeVore to Everyone:

Behringer makes cheap and sometimes cheapo gear.

2026-03-31 20:45:45 From Jess Berg to Everyone:

Look up X32 vs M32, lots of info out there...

Stephen (Steven) DeVore: ❤️

2026-03-31 20:48:42 From Chris Myring to Everyone:

"Trade dress" - I hadn't heard that term:

https://en.wikipedia.org/wiki/Trade_dress

Stephen (Steven) DeVore: 👍

Jess Berg: 💡

2026-03-31 20:50:02 From Stephen (Steven) DeVore to Everyone:

Do general musicians and composers care about OSC? (other than that Moog One)

2026-03-31 20:52:40 From Quinn Ouyang to Everyone:

have to drop out early, thanks for the talk!

Jess Berg, Michael Ashton: 👍

2026-03-31 20:53:02 From Stephen (Steven) DeVore to Everyone:

List several major uses of OSC?

2026-03-31 20:53:09 From Jayney Wallick to Everyone:

Thanks for stopping by Quinn!

2026-03-31 20:57:12 From Stephen (Steven) DeVore to Everyone:

Replying to "Do general musicians and composers care about OSC?...":

"Usually, no-not most general musicians and composers.

Most musicians who just want to play, record, sequence, and mix can work for years using MIDI, audio, plug-ins, and normal controllers without ever caring much about OSC. OSC is a separate real-time message protocol for communication among computers, synthesizers, and multimedia devices, and it is mainly useful when you want more custom or network-based control than plain MIDI normally gives you.

The people who do tend to care about OSC are the ones doing things like:

- live electronic performance
- interactive installations
- custom controller design
- tablet/phone control surfaces
- computer-music setups
- multimedia systems where music, visuals, sensors, or multiple machines need to talk to each other.

Official OSC and music-tech sources describe it in exactly that broader computer/synth/multimedia-control role. ..."—ChatGPT 5.4 Thinking.

2026-03-31 20:57:39 From Stephen (Steven) DeVore to Everyone:

Replying to "Do general musicians and composers care about OSC?...":

"A practical clue is that OSC shows up strongly in tools aimed at advanced control rather than ordinary songwriting.

REAPER has built-in OSC control-surface support, and TouchOSC is specifically built to send and receive OSC or MIDI as a customizable control surface. Ableton's Max for Live materials also point toward OSC when Live is being extended outward into custom control, hardware, or other external systems."

2026-03-31 20:58:08 From Stephen (Steven) DeVore to Everyone:

Replying to "Do general musicians and composers care about OSC?...":

"So the plain answer is:

General musicians/composers usually do not need to care about OSC.

Tech-heavy electronic musicians, experimental composers, live-performance programmers, and custom-rig people often do.

A compact way to think of it:

MIDI = standard music control language almost everyone uses

OSC = more flexible control/network language mainly for specialized setups

Sources:

Open Sound Control paper/spec:

<https://opensoundcontrol.stanford.edu/files/1997-ICMC-OSC.pdf>

OpenSoundControl.org overview: <https://opensoundcontrol.org/>

REAPER OSC page: <https://www.reaper.fm/sdk/osc/osc.php>

TouchOSC: <https://hexler.net/touchosc>

Ableton Max for Live: <https://www.ableton.com/en/live/max-for-live/>

"

2026-03-31 21:00:17 From Michael Ashton to Everyone:

another OSC control app: <https://oscpilot.com/>

2026-03-31 21:04:00 From Chris Myring to Everyone:

In the Marx Brothers film Duck Soup. Ambassador Trentino (played by Louis Calhern) complains, "I didn't come here to be insulted!", to which Rufus T. Firefly (Groucho Marx) instantly retorts, "That's what you

think!". It is considered one of the film's most famous quips. Often misquoted as, "Where do you usually go?"

Stephen (Steven) DeVore, Michael Ashton, Jayney Wallick: 😊

2026-03-31 21:07:19 From Stephen Graham to Everyone:

Thank you very much for the presentation and discussion. Bye.

Stephen (Steven) DeVore: 👍

2026-03-31 21:07:32 From Elijah Rabinovich to Everyone:

Thank you everyone!