

NDI

NDI is a network protocol that enables audio, video, and metadata signals to be sent over standard networks in real-time. Broadcast-quality video in a high-quality, low-latency

- [What is NDI?](#)
- [awesome-ndi \(github resource\)](#)

What is NDI?

NDI (Network Device Interface) is a technology developed by NewTek that allows video, audio, and data to be shared across a local network in real-time. It's commonly used in live production environments but has endless possibilities for creative applications, especially in theater, performance art, and interactive installations.

Simply said; Imagine you have a projector, a computer, and a camera, and you want them all to "talk" to each other without using a bunch of messy cables. NDI lets these devices send and receive high-quality video and audio over your Wi-Fi or Ethernet network as if they were physically connected. It's like sending video files across your network instantly—without needing to export or transfer anything.

What Can You Do with NDI?

1. Stream Video Between Devices:

- Send live video from one computer to another (e.g., send a TouchDesigner, Isadora or Resolume output to a projection laptop).
- Use your phone or tablet as a wireless camera for your performance or installation.

2. Mix Media in Real-Time:

- Combine multiple video feeds in software like OBS Studio or VJ tools like Resolume for live shows.
- Add live effects or layers to your video feeds.

3. Integrate with Performance Tools:

- Share a live camera feed on stage with a projection in real-time.
- Sync visuals with music or sound effects in live performances.

4. Collaborative Artwork:

- Share content between artists' devices in a multi-user environment, such as during a workshop or live performance.
 - Use it for interactive installations where different pieces of hardware (cameras, projectors, or phones) are part of the experience.
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Why should I use NDI?

- **Flexibility:** No need to move everything into one computer. Let every device do what it does best while connecting them via a network.

- **Cost-Effective:** Avoid buying expensive video switchers or capture cards; NDI works with your existing network.
 - **Collaboration:** Great for team projects where multiple artists contribute video, sound, or interaction in real-time.
 - **Live Creativity:** Perform and tweak visuals or sounds on the fly, ideal for improvisational art or performances.
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What Do You Need?

1. A device that supports NDI (most computers and some cameras do, check out apps like [ZIGCAM \(mac\)](#) or [NDI CAMERA \(android\)](#)).
2. Software like **OBS Studio**, **TouchDesigner**, **Isadora** or **Resolume**, which can send or receive NDI streams.
3. A local network (Ethernet is better for speed; Wi-Fi works but might have delays, especially with more than 1 stream).

want to know more:

[what-is-ndi-everything-you-need-to-know](#)

awesome-ndi (github resource)

<https://github.com/florisporro/awesome-ndi>

“ Network Device Interface is a royalty-free software standard developed by NewTek to enable video-compatible products to communicate, deliver, and receive broadcast-quality video in a high-quality, low-latency manner that is frame-accurate and suitable for switching in a live production environment.

“ This is a curated list of tools related to NDI.