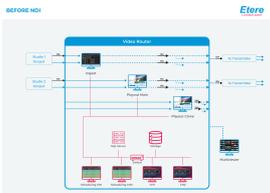


## ETERE NDI PLAYOUT

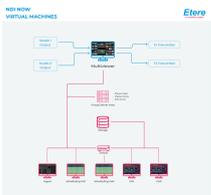
Etere offers a full SDI over IP solution that is scalable, easy to manage and cost-effective. It enables you to build an NDI® playout that requires no SDI hardware and is less expensive than a traditional solution. It also includes a Software NDI multiviewer.



Workflow Before Etere



With Etere Solution



Virtual Machines



ETX-M IP Multiviewer

IP migration is increasingly becoming a reality. Etere's market-proven complete IP playout solution allows you to leverage the benefits of IP and gain a competitive advantage ahead of other solutions such as SMPTE 2110, Aspen and AIMS, saving money today.

### Etere Simplifies your IP Migration

Etere streamlines your facility with a fully digital solution that does not require traditional SDI hardware, cables or other accessories. It is a complete solution that includes **Ingest, Media Asset Management (MAM), Newsroom, Transcoding, Quality Control, Playout, Graphics, Etere ETX-M Multiviewer and Closed Caption**. It is also capable of managing 4K, HD and SD. Whether you are a small media company or a large media enterprise, Etere makes it easy for you to leverage the advantages of IP with its streamlined, highly integrative, cost-effective and scalable **Etere Ecosystem** architecture. Etere complete IP solution provides smooth integrative **Etere Ecosystem** workflows that allow you to manage ANY type of playout, including live playout over IP. Etere Ecosystem provides real-time updates from a centralised database and features a scalable, customisable architecture that suits your needs. Additionally, Etere IP solution is integrated with **Etere ETX-M Multiviewer**, a software that allows you to manage and adjust up to 9 monitors and 30 sources simultaneously.

### Ready for Virtual Machines (VM)

Etere's IP technology allows you to use VM everywhere for any scope; only the **ETX-M Multiviewer** needs the SDI cards. Finally, you can have a virtual environment to manage your MAM, ingest, transcoding and playout, with more than 50% savings in hardware and maintenance costs.

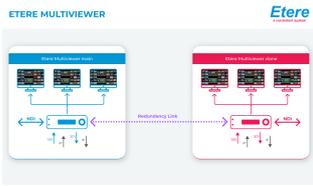
### Advantages

- Easy as it requires only standard Gigabit cables
- Inexpensive and low TCO because it requires only common IT components
- Flexible
- Ready for VM and Cloud
- Open to the future, it manages SD/HD/4K signals without any changes
- Redundant with the use of standard IP adapters

### Network Device Interface (NDI)

Network Device Interface (NDI) is a royalty-free standard developed by NewTek that enables multiple video systems to identify and communicate with one another over IP as well as to encode, transmit and receive many streams of high quality, low latency, frame-accurate video and audio in real-time. Etere has supported Newtek NDI technology since 2014, when its IT-based channel-in-a-box system, Etere ETX, was integrated with NDI support. NDI can run over existing 1 Gigabit networks, allowing easy protocol adoption without new infrastructure. This is achieved through video data compression with the NDI codec, which delivers 1080 full HD videos at VBR data rates of around 100mBit/second.

Etere allows every station to capture or play a video over IP without expensive investments.



IP Multiviewer Diagram

## Key Features

- The first to provide automated reconnections for playout
- Increases efficiency and reduces costs
- Easy migration with a complete IT-based system without hardware requirements
- Future-ready solution that is independent of changing specifications and formats
- Low CPU impact and latency compression for SD, HD, and 4K video, audio, and metadata
- Encode, transmit and receive multiple streams of video and audio in real-time
- Manages multiple high-quality and ultra-low latency video streams simultaneously



## Etere ETX-M IP Multiviewer and Etere ETX Legacy Converter

**Etere ETX-M IP Multiviewer** is a software-based solution that enables the management and adjustment of multiple inputs of live video and network sources from a single interface. It can manage up to 9 monitors and 30 sources simultaneously, including email notification alerts, log reports and real-time previews. The IP Multiviewer is also integrated with **Etere ETX Legacy Converter**. Etere ETX Legacy Converter converts SDI in and SDI out in Network Device Interface (NDI) streams with very low CPU impact. It can easily manage more than 20 channels, limited only by the Network interface speed that it is on. The Etere ETX Legacy Converter helps limit connection and bandwidth. With technological advances and network interface speeds, IP deliveries can be faster than SDI deliveries.

- Manage all your requirements of I/O in a single box
- Loudness Control
- Highly redundant
- Efficient H264 and H265 encoding
- Receive automated notifications instantly whenever there is an error
- NDI-enabled, can convert SDI or IP streams to NDI IP data
- ETX-M IP Multiviewer and configuration without switching screens



## Etere IP Bandwidth and Compatibility to Output SD or IP/TS or IP/UDP

Etere is capable of sending and receiving multiple sources as well as managing various inputs and output ports. The bandwidth consumption is only limited by the sources that are in use. IP data packets are automatically processed, sorted and delivered to the appropriate routes. Etere supports SD, HD and 4K deliveries via IP. With Etere's IP support, the receiver connects to the sender via a point-to-point IP connection with failover and automatic re-connection capabilities.



## Etere Ecosystem Integration

Etere enables an integrative framework of workflows with **Etere Ecosystem**. From planning to sales, Etere Ecosystem can connect, integrate and provide real-time updates from a centralised database.

- **Etere ETX-M IP Multiviewer** can monitor multiple live video input sources for a simultaneous broadcast from a single interface
- Live subtitling with **Etere ETX Inserter** and **Time Delay**
- **Etere ETX** is a complete channel in a box with full IP in and out capabilities
- **Etere ETX-G** allows you to add or delete graphics up to 30 seconds before playout
- **Etere QC** for an automated quality check on video/audio files and detection for issues including freeze frames, black frames, scene changes and audio loss
- **Etere Master Control** modernises all master control features in a 100% software-based solution with a touchscreen panel

