The D21m Livewire I/O card is the newest addition to Studer’s versatile D21m I/O system. The D21m system is used for mixing consoles and audio routers but can also be used for standalone applications.

Live-What?
Livewire is an audio networking protocol developed by Telos Systems. It enables the transportation of real-time, live audio together with control metadata via a switched Ethernet network. The network delivers the audio data via switches to all devices to which the audio is assigned.

When using Livewire, audio can be directly connected to the network. Audio delivery systems – or other audio devices, such as Studer’s renowned mixing consoles – can use their Ethernet connection for sending and receiving audio signals to and from the network with no alteration or degradation, ensuring low-latency workflow.

The Studer Approach
While standard sound or audio I/O cards require individual cabling, Studer’s D21m Livewire card...
Studer D21m Livewire Card

transfers the combined digital audio data over Ethernet links. The Livewire card is a single-slot unit accommodating two Livewire SIM modules. Each Livewire SIM module can send and receive up to eight stereo signals to and from the Livewire network.

**Synchronisation**
Each Livewire node features a PLL to recover the audio clock from multicast clock packets generated by the internal master.

This Livewire audio clock may be used as clock reference for a Studer OnAir or Vista console.

If required, the mixing console can be the Livewire clock master alternatively.

**Applications**
The new Studer D21m Livewire card may be added to new and existing Studer consoles. The diagram above illustrates how to connect additional outside sources and targets to an existing system by using Livewire.

In order to interconnect inputs and outputs of two or more different consoles, the combination of Studer’s RELINK (I/O sharing) with Livewire leads to economic solutions if the number of shared inputs and outputs is in a low to medium range.