



**A discussion with Jonathan Wales,  
CEO Sonic Magic Studios**

Sonic Magic Studios, a premiere boutique post production facility located in Culver City, CA, specializes in delivering incredible soundtracks for major Hollywood movies with unparalleled quality.

**“If we seem a little fanatical - that’s because we are”**

To provide the very best and most flexible service to their clients, Sonic Magic maintains one of the most technologically advanced facilities of its kind. Sonic Magic was one of the pioneers of fully-centralized production networking in a small facility which provides advantages in efficiency and flexibility; translating directly to a better result. The studio currently maintains over 250 Terabytes of storage, all fully backed up and completely accessible from anywhere inside or outside the facility with full security.

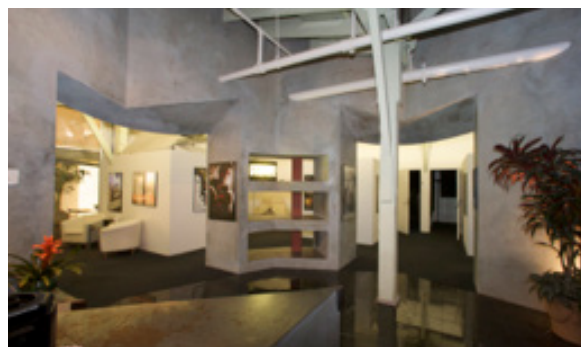
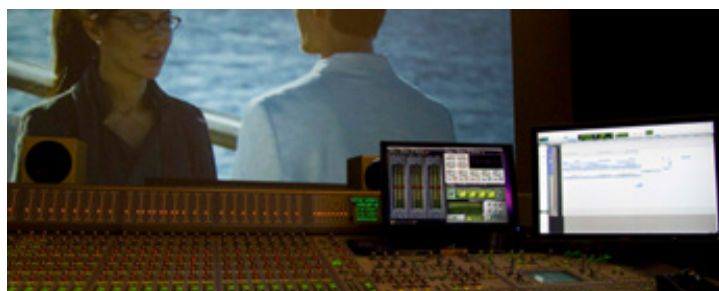
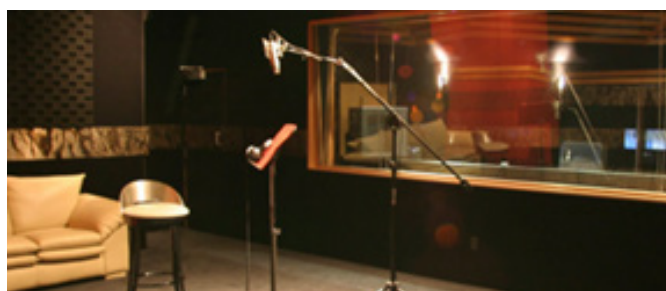
Sonic Magic currently operates four mixing stages ideal for a multitude of projects from small feature films, television series and commercials through to major Hollywood films; supplemented by two ADR (Additional Dialogue Recording) stages with sufficient space to comfortably cater for single actors and large groups. A Foley recording stage is staffed by dedicated and highly experienced sound magicians recording the highest quality of sound effects from a vast quantity of on-site props.

**“Everything here serves a purpose - to enable us to deliver the very best results possible in the most flexible and comfortable surroundings”**



All the stages are supported by a set of ten Media Composer Suites and several sound editing rooms. The whole operation is operated by a creative team of dedicated sound and recording specialists; Sonic Magic’s most important asset - a team of sound supervisors, editors and mixers whose expertise consistently delivers the magic into sound recordings.

The Sonic Magic philosophy is that the true function of technology is to serve the creative process. Consequently an environment has been built which incorporates the very latest state-of-the-art equipment around a centralized production network infrastructure leveraging fiber channel and high-speed Ethernet backbones to their full potential. At its core is an Avid ISIS 5000 central storage system, combined with an enterprise-grade Cisco and Q-Logic switching infrastructure and ISIS, Unity, XSAN-2 and FibreJet Storage Area Networks.





To provide most efficient use of the stages, studios and equipment, Sonic Magic has adopted the use of the IHSE Draco tera KVM switch. This provides a central switch to interconnect any of the systems to any workstation anywhere in the building; allowing operators to connect and work where it is most convenient to them, rather than be tethered to a dedicated location. This, in turn frees up studios and control rooms for more efficient working.



### Instant switching

Before adopting the IHSE solution, Sonic Magic considered alternative systems but found the inherent switching latency of 2–3 seconds to be too great, resulting in user frustration over the course of a day. Switching in the tera is instantaneous. With nine or ten systems in use in just one room at the same time, but with only 3 or 4 terminals in the room, instant switching is essential for a smooth and fluid workflow. Switching in the tera is instantaneous, with no delay or skipping a frame. The IHSE switch was the only one that offered the level of quality required – true video with 1:1 mapping and offered the best video quality by far.



The deployment of the Draco tera throughout the facility has provided a real revolution in the method of operation. Primarily in three separate areas of operation: it provides all-digital, original video quality that shows no degradation; allows flexible deployment of single and multiple monitor situations so operators are not tied to desks and delivers full production-quality digital audio through the KVM system so the audio feed switches alongside video with no perceivable delay.

It means that remote extensions can be located in the most convenient position and divorces monitors from workstations, so that the number of monitors is related to the number of users, not systems. There is no perceivable difference in video quality, mouse performance or display frame rate. It feels like being directly attached to your computer.

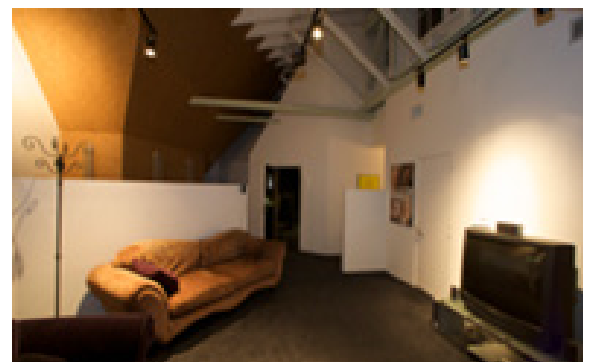
**“We are thrilled with the system and are constantly expanding the amount of IHSE equipment - we are set to use even more”**

The studio has grown from using single pairs of extenders to the full switching system as more and more uses were found for it.

**“We upgraded the first system we had to a bigger one – because we liked it so much”**

### Build and reliability

The products themselves are rock solid and very sturdy: providing the robustness and resilience that are essential in high-usage, active environments. They are built to enterprise level with redundant power supplies and hot-swap capability for continuous operation - they just keep working.



### Simple installation and control

Installation of the IHSE system was simple. In fact it was achieved while the facility was still operating with just minimal disruption to workflow. While the switch was being installed the installation team simply temporarily connected users directly to machines on a 1 to 1 basis using the same extender units that were later use with the switch. After the switch was installed and configured, users were routed through it and the whole system become active. Total disruption was about a minute at each changover; and then they had the full benefits of the switching system.

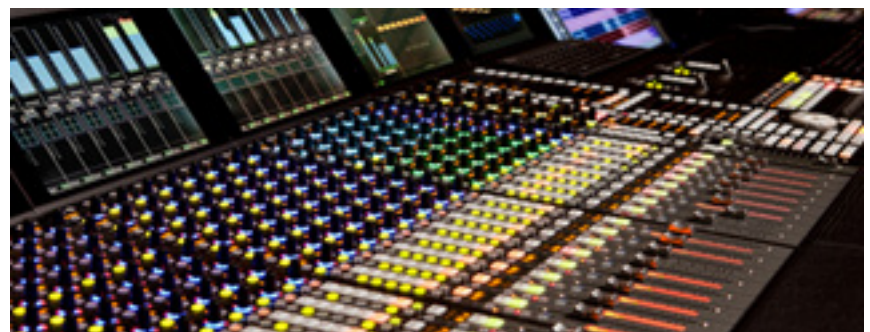


Switch operation and management is extremely simple from central and remote locations using network access and the web interface GUI. Pre-stored configurations and easy access to switch connections means that the system administrator can change the use of a studio in less than 5 minutes, so studio down-time is kept to an absolute minimum.

**“Allows a level of collaboration and flexibility we hadn’t even imagined. It does exactly what it is supposed to do, all the time”**

### High level of security

The Draco tera switch requires users to log-in before anyone can access the system which provides a high level of security and allows monitoring and recording of activities. In addition security settings allow each workstation to be restricted to using just keyboards and mouse, so it is not possible for unauthorised users to plug in flash memory sticks and copy files at their terminals. This provides another level of security.



**“Confidence in the future - the entire workflow for the whole Sonic Magic facility is entrusted to this technology, this IHSE solution - it would not be done without full and total confidence in it”**

### Support

IHSE engineers provide really great support. Requests for features and operational issues are resolved in a timely manner. New firmware updates are provided as they become available, frequently with Sonic Magic recommended additions.

## About IHSE



IHSE GmbH Germany stands for 25 years of experience when it comes to reliable and cost-effective high tech products, specialising in KVM/Video matrix switches, extenders and converters. As a global supplier of future-proof and market-oriented solutions, their continuous innovation and product development set IHSE apart - a view supported by many blue chip clients worldwide in the area of TV & Broadcast, post production, control rooms and industry as a whole.

A good example of the outstanding IHSE technology is the Dra-

co family of KVM/Video matrix switches which is the only multi-format switch on the market, capable of mixing both Cat X and fiber optic connections between source and target stations.

First introduced in 2010, the Draco tera KVM/Video matrix switch has quickly become the only intelligent choice for enterprise-level high definition HD-KVM matrix switching. Equipped with a unique Flex-Port technology, the Draco tera offers total flexibility of input and output ports. Any conceivable combination of I/O port configurations are achievab-

le within the maximum number of available ports (48, 80, 160 and 288 port options are available). By using intelligent video encoding, video and data signals are optimised for maximum bandwidth usage to provide the most outstanding visual display available. When there is a need to deliver full motion video, the Draco tera can distribute full screen moving video up to 1080 p60, in real time, without artifacts and near zero latency. The modular structure offers the freedom to scale your switch ports as your needs evolve and the frame can easily be mixed with Cat X or fiber optics.



Another significant feature of the Draco tera system is instant switching between different CPUs. The Draco tera technology responds to switching commands in milliseconds which eliminates the annoying delay and image re-sync problems found in IP-based switching solutions.

It is also possible to connect Draco Cat X extender devices as input devices and re-transmit signals over fibre optics using Draco's new long distance XV fiber extenders. Operation of the connected Draco extenders simply requires the device to be powered and connected to the

matrix switch. As soon as the Draco extender is connected to the matrix switch it is registered in the CPU with a clearly defined identification number (ID). Depending on whether the physical device is a console or CPU extender module, the device's ID number is remembered. This powerful feature allows the Draco extender module to be moved to any other port without affecting setup and configuration between sources and display devices.

Each Draco tera system contains an internal CPU that allows users to control functions via an on screen display (OSD), a software user in-

terface (GUI), or an RS-232 serial interface. Additionally, the Draco tera can easily be configured through any third party control system such as Crestron or AMX.

Our products are designed for longtime applications which is shown by a MTBF of more than 400.000 POH (power on hours).

The reliability is proven in military applications like NATO.

