

PRO AUDIO REVIEW



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Gear & Software Reviews For The End-User

U.S. Exclusive!

Smart AV Post-Production Console

www.smartav.us

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BY STEPHEN MURPHY

To paraphrase the opening of H.G. Wells' 1898 novel *The War of the Worlds*, "No one would have believed in the last years of the twentieth century that this world was being watched keenly and closely by intelligences greater than most controller manufacturers..."

In development for the last 15 years of the twentieth century, the newly released Smart Console from Sydney-based Smart AV indeed bears a striking resemblance to the invading Martian ships depicted in the 1953 film version of Wells' legendary novel.

Though Smart AV's ultimate goal may be the wholesale annihilation of its competition, after being given the opportunity to use the Smart Console first-hand at U.S. distributor ATT's headquarters, I can assure you that this new technology is presented for the benefit of all recording-kind.

STATE OF THE ARC

When one first encounters a full-blown Smart Console in person, the word that comes to mind is "Cool!" (Perhaps even preceded by an unprintable adjective). If this is not the case, proceed directly to a doctor for an EKG and/or consider retiring from the business.

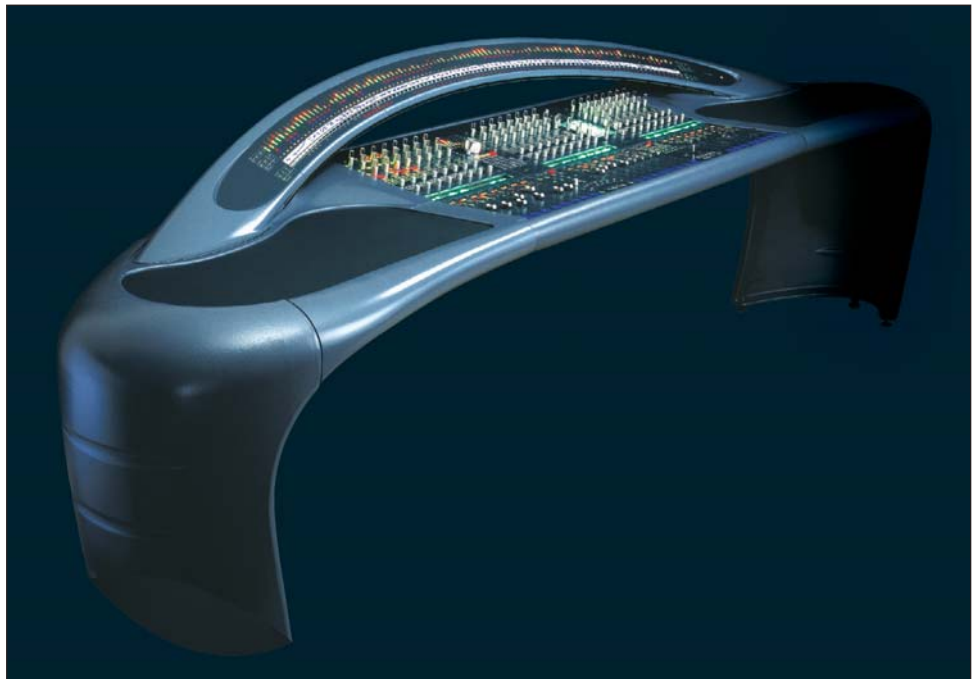
Though looks don't usually count for much in the scheme of things when reviewing pro audio products, the Smart Console is an exception. In fact, it is precisely the design of the Smart Console — especially its all-encompassing Arc controller/meter bridge — that will set it apart in the marketplace.

Additionally, the usual review question, "But how does it sound?" does not apply to the Smart Console, for it neither passes audio nor produces any sounds. In that respect, Smart Console is a bit of a misnomer: though, by strict definition, it is a console, it is what is more traditionally referred to as a software controller.

The Smart Console is a full-featured controller system consisting of a PC-based console engine and a physical control surface plus aforementioned Arc controller/meter bridge. The engine computer requires no user interaction and can be rackmounted in an amp closet or machine room.

The Smart Console features hot-swappable Arc segments and fader banks, and supports redundant console engines with seamless switching. Communication between the control surface, console engine and DAW computer is

Smart AV E96/24/24 Smart Console



accomplished through proprietary protocols using standard Ethernet connections.

Configurations range from the E48/16/8 (48 Arc channels/16-channel strip bay potential/8 channel strips installed, \$55k) to the flagship E96/24/24 model (\$150k); the latter is the model referenced throughout this article.

In theory, the Smart AV E96/24/24 is capable of controlling up to 9,216 software channels of audio (that's 96 banks of 96 channels each). I say "in theory" not because I doubt the Smart Console is capable of such a feat, but because, in practice, our human brains would simply explode when faced with the prospect of mixing such a project.

Since it is an open-architecture and, potentially, an open-platform product, the Smart Console may ultimately be able take advantage of the large number of professional audio applications used in recording, mixing and post production studios. The challenge for Smart AV in the coming months and years is that the console is not simply a MIDI-mapped control surface, but an in-depth control-plus-operating system requiring a substantial programming investment

for each dedicated application to be supported.

Currently, the Smart Console engine is available for use with Apple Logic Pro 7, Klotz Digital VADIS System, Merging Technology Pyramix Virtual Studio, Yamaha DME64N/DME24N and SADiE Series 5/PCM-H64.

ARC-ITECTURE

The Smart Console boasts a large array of workflow enhancements and sophisticated control features, many of which vary depending on the particular software application with which it is used.

But it is the Arc technology that defines the Smart Console and provides its unique operational concepts. As space is limited, the bulk of this article necessarily focuses on the innovative Arc and its operations with the control surface. A complete feature set can be found on the Smart AV website (www.smartav.net).

According to the manufacturer, the prevailing concept in the design of the Smart Console is to reduce the number of controls on a panel while simultaneously reducing the number of actions

required to gain access to otherwise out-of-reach controls and channels.

In other words, Smart AV is taking on the physical gyrations required of working on a traditional long console and the constant button-pushing machinations required of typical small controller/large track-count workstation setups. The Arc is the key to accomplishing this goal.

Basics first: the aptly named Arc encompasses the length of the control surface and primarily performs audio metering and channel selection functions.

Duplicate end panels found at the extremes of the Arc allow, among other functions, the selection of peak, VU and fader metering modes. Each of the 96 channels (called Arc channel segments) feature 26-segment programmable tri-color meters with adjustable calibration marks.

Each Arc channel segment also features active fader and fader movement (direction) indicators, as well as solo and mute status indicators.

In addition to its metering duties, the Arc is the principal method for individual channel or

control surface by touching individual Arc segments in any order and/or by wiping a finger across a number of Arc segments. Channels are presented on the control surface in the order in which they are selected. When wiping more channels than can be displayed on the faders, the overage channels are ignored.

Smart AV provides several methods of further controlling and facilitating complex selection operations. For instance, below each fader is a channel hold button for latching the currently displayed channel. This overrides any other Arc selection commands on that channel; newly selected groups of channels using Chair or Priority Wipe modes will simply flow around held channels.

An Inject button located above each fader operates in tandem with making a channel selection: pressing the Inject button and then selecting a channel on the Arc “injects” that channel into the selected control surface channel.

Solo and mute modes can be assigned to the Chrome Modifier Strip, allowing quick, one-handed soloing or muting of any of the

The EQ section of each Smart Console channel strip is comprised of three dual-concentric touch-sensitive rotary EQ encoders with 70-LED EQ fan displays. EQ, plug-in and channel settings of the active channel are also displayed and adjusted via a master active panel — analo-



PAR Studio Editor Steve Murphy with Smart AV.

gous to a channel inspector in typical DAWs — featuring a 6.5-inch 640 x 480 TFT touch screen and 10 dedicated dual-concentric touch-sensitive rotary encoders.

Continuing down the channel strip, the aux section features nine dedicated aux select switches (can also be configured as three banks of six aux busses) and a motorized Penny & Giles rotary send encoder. A high-resolution rotary pan encoder features a unique (and surprisingly functional) surround pan display.

Speaking of unique, a motorized scan-bot can be sent crawling across the Arc to scan in hand-written notations made on the Arc scribe strip; notations are subsequently shown on vacuum fluorescent displays above each fader; they can also be stored and recalled on a project basis.

Each channel fader features a 100mm Penny & Giles touch-sensitive motorized fader, 53-segment level meter and automation read, write, trim, touch and null indicators. The components, exterior materials and build quality of the Smart Console are all top notch.

The Smart Console also features a full complement of grouping, transport, scene and monitoring functions; again, please consult the Smart AV website for full details and descriptions.

CONTROLLING INTEREST

When described on paper, the operations of the Smart Console may at times sound complex or even intimidating. The reality is that, in use, the Smart Console proves to be quite intuitive and requires very little time to be up and running at a reasonably functional level.

The Smart Console is a full-featured controller system consisting of a PC-based console engine and a physical control surface plus the aforementioned Arc controller/meter bridge.

groups-of-channels selection. An Optical Touch Strip runs the length of the Arc, just below the channel meters, providing a selection point for each channel. The optical strip is paralleled on the lower edge of the Arc by a capacitance-sensitive Chrome Modifier strip. The optical strip provides the means for making channel selections, and the Chrome strip operates as a programmable global modifier on the selection.

In its default mode, touching a single Arc channel immediately brings up that channel plus those surrounding it on the physical control surface faders and strips. This mode is called “Chair Mode” as it is designed to emulate the movement of an engineer up and down the length of a long console.

In Priority Wipe Mode, individual channels and groups of channels can be brought up on the

96 channels displayed across the Arc without affecting which channels are currently represented on the control surface. Conversely, mute and solo (and custom parameter) Arc selection modes can affect the represented control surface channels, or effect a custom parameter change (such as ‘return to unity’ or ‘copy this EQ setting’) across selected channels simply by touching or wiping across Arc channel segments — very cool, very powerful.

SCRATCHING THE SURFACE

The control surface is comprised of operational control panels and fader/channel strip sections. The modular surface can be laid out in various configurations and expanded with additional channels or optional application-specific panels.

In this respect, I can think of no better compliment to offer the designers. They adeptly provided an extremely easy entrée to an ultimately deep and flexible control system. You can go from never having seen a Smart Console to using it on a session in about a half hour (assuming existing knowledge of consoles and controllers); you can also spend days and weeks customizing and exploring the rest of what the console has to offer.

As I stated earlier, the immediate challenge for Smart AV is to develop support for the major software applications in use in the obvious target markets. It also must reach a com-

plete level of support for the software applications with which it has already partnered; this is an ongoing operation.

I was a bit disappointed, for example, with some limitations imposed upon the user while using the Smart Console with Apple Logic: one must import existing audio data and/or sessions into a dedicated Smart Console-specific Logic template; plug-in control is currently limited to Logic's own EQ, compressor and gate (already loaded on every channel of the template); the template is limited to eight subgroup returns (and worse, sends, not buss assignments, were used to send audio to the group returns); also,

track names entered in the Logic session were not ported to the control surface.

There are work-arounds for many of these issues by accessing Logic using the old-fashioned method: keyboard and mouse. Smart AV Managing Director Joe Narai indicated that several of the shortcomings I noticed have already been resolved for the next update; they also actively encourage feedback and suggestions from users in order to improve the console's operations.

A few niggling issues aside, by and large I was consistently impressed by the console's capabilities.

Narai also indicated that Smart AV is currently developing its third-party software developer's kit, and several major software developers are interested or already onboard to support the Smart Console.

More good news is that the Smart Console is the epitome of open-architecture design, and can be improved and virtually reinvented for new applications without additional hardware investment. And because it has its own operating engine, it can easily accomplish complex multi-channel parameter adjustments, grouping functions and the like that the target audio applications can't even touch.

SMART. VERY SMART.

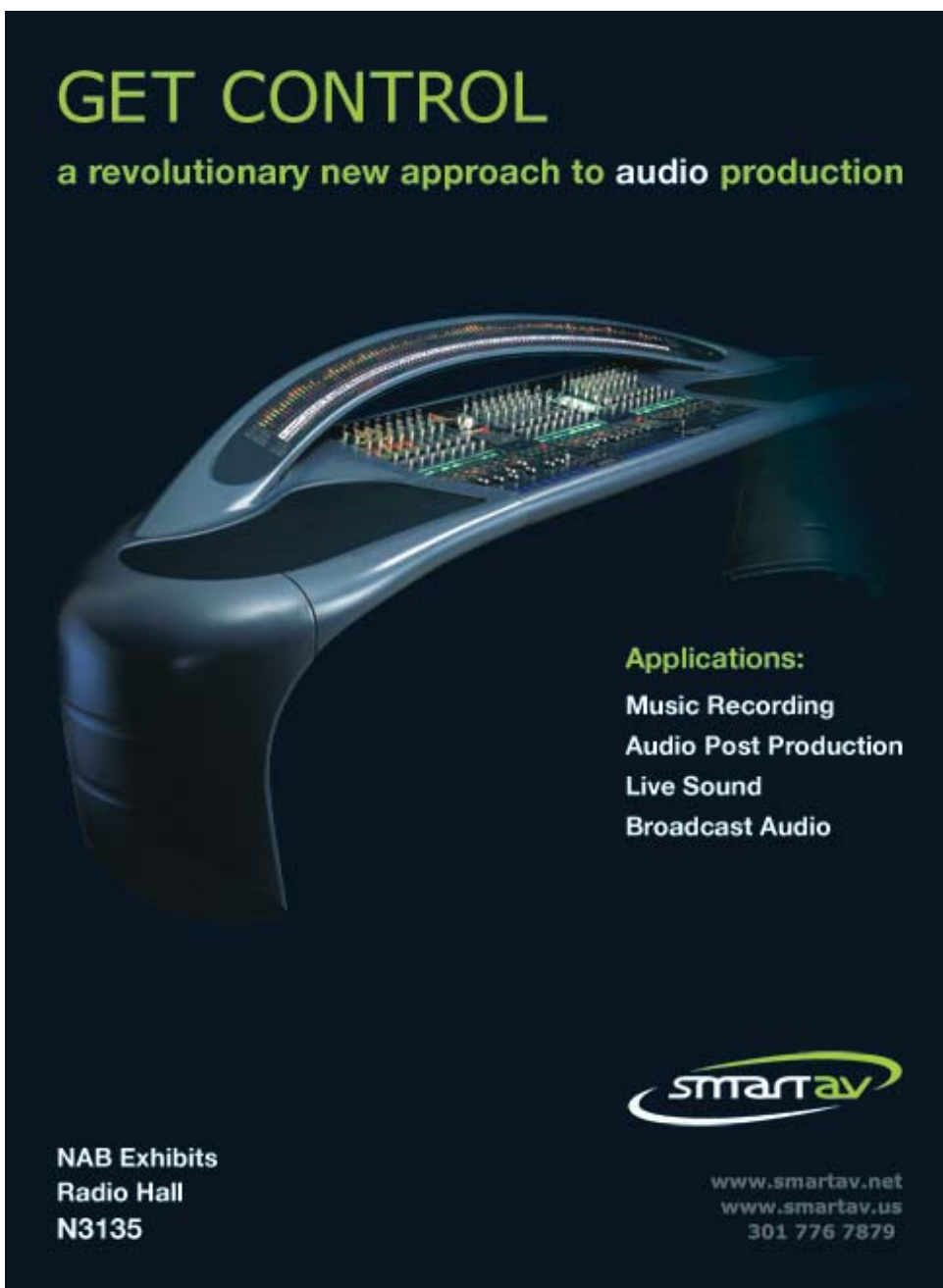
In using the Smart Console, I couldn't help but think that big things are in store for the company. In so many specific ways, this controller represents a big leapfrog over existing mixing technologies.

Smart AV has pulled off an amazing feat, improving upon the ergonomics of traditional consoles and control surfaces, while at the same time increasing functionality and decreasing the learning curves involved. With the Arc as its centerpiece, the Smart Console takes all the work out of selecting channels and switching layers in order to have the proper controls at your fingertips.

Given the console's current outstanding implementation and its future potential, the developers could not have chosen a better name for the company or console.

ATI Group Distribution (and it's North American distributor) at www.smartav.us; 301-776-7879; Smart AV company HQ at www.smartav.net.

PAR Studio Editor Stephen Murphy has over 20 years production and engineering experience, including Grammy-winning and Gold/Platinum credits. His website is www.smurphco.com

The advertisement features a dark blue background with a central image of the Smart AV console. The console is a sleek, ergonomic device with a curved top and a handle. The top surface is illuminated with a grid of small lights, suggesting a digital control interface. The text is arranged around the console, with a large headline at the top left, a list of applications on the right, and contact information at the bottom left and right. The Smart AV logo is positioned at the bottom center.

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