



The Case for ICON and Pro Tools HD being the future of mixing.

(AKA : 10 Reasons why customers choose ICON)

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1. Affordable and Accessible. When Avid introduced Pro Tools® TDM in the mid-Nineties, it changed the game of recording and mixing. Users could now afford to buy a fully automatable/recallable solution for well under \$40k. Until then, recording studios and post facilities mixed on large, expensive automated analog or digital consoles, many of which reached into the \$500,000 range, and beyond.

Pro Tools TDM was an innovation that brought a shift of power to the record-label artist. By investing their advance in a Pro Tools TDM system - instead of spending it on studio time – artists and producers could amortize the investment over multiple projects. They also started taking DAW rigs on the road to write and then, ultimately, to create tracking/editing suites at their personal-use facilities.

A similar transformation was taking place in post production, with sound editors and mixers working “In The Box” during sound designing, recording ADR /Foley and pre-dubbing, while ultimately owning their own Pro Tools systems.

Pro Tools TDM provides a smaller format and, in many ways, a more powerful mixing solution. Users can also work on LE-based systems at a home facility, and then take the project into an ICON-equipped room to complete the final mix. All automation and effects settings remain safely with the project. The economics achieved with ICON and Pro Tools|HD® mixing is changing our industry by making it affordable to so many users.

Simon Jones, Owner, Soundworks Wales UK: “ICON provides complete edit and mix integration, while also offering the kind of user feedback and functionality previously on offer from systems costing well into six figures. And the surround power is outstanding. There couldn’t be a better time to invest in ICON.”

Brian Malouf, Recording Engineer, Producer and A&R executive: “When you compare [ICON] to what you would have to spend to get this kind of flexibility, *it’s the most economical piece of gear I’ve ever purchased.*”

Tony Volante, Re-Recording Mixer at Sound Lounge NYC: “The economics [of ICON] is fantastic. It allows you to build an extremely powerful system, but very economically.”

Dave Cadle, Owner, Envy in London: “I was blown away by the ICON when I first saw it, and making ENVY an all-Pro Tools facility is the easiest decision I’ve had to make. *Only Digidesign® offers the price/performance ratio that ensures commercial viability.* ICON has quickly become the industry standard work surface our operators want to work with.”

2. Plug-In Power and Performance. In the early days of modeling software, a classic analog compressor plug-in might look cool yet probably didn't sound as good as the original hardware. All of that has changed. Now users listen to A-B shootouts against the real thing and exclaim: "That's it! I'm sold - it works for me!" And, of course, the plug-in costs significantly less. In addition, an ICON console is far more flexible because, unlike a conventional analog or digital console, the design isn't tied to a single type of equalizer or dynamics section. Variety is the (mixing and creative) spice of life.

Beyond EQ and dynamics plug-ins, there are many other innovative and freely adjustable effects that ICON provides. Ever tried to page through the small LCD screen on an outboard effects processor to access parameters? Not only are the settings non-automatable - sure you could change a patch via MIDI, but how convenient is that? - you spend most of the time trying to find a different patch or not changing the patch at all. (And don't forget that a high-end reverb unit often costs as much as a full Pro Tools rig.)

With hundreds of third-party developers designing and creating plug-ins for the Pro Tools platform, the variety and innovation has revolutionized the sound mixing business.

Skip Burrows, Owner/Engineer, Sunrise Sound: "Our ICON room is booked practically non-stop. The degree of control ICON gives us over Pro Tools and its plug-ins lets us work faster and take on a wider range of diverse projects. Clients expect to be able to move projects easily between rooms and studios."

Kelly Cole, Senior Recording Mixer, Sharpe Sounds: "We've made a strong shift toward software plug-ins, steering away from outboard gear altogether. In addition to their *exceptional sound quality, working with plug-ins gives us the ability to automate every aspect of a session, save it and move it from one studio to another.*"

Seth Present, Engineer/Mixer: "I prefer to stay 'inside the box.' *The VAST selection of plug-ins available now provides more choices than I could possibly need, and sonically gives me every flavor I need.* Add to that the ability to automate and recall everything at a moment's notice and, honestly, I can't imagine having to do it any other way now."

Trent Reznor, Artist and Producer: "What's happened in terms of virtual instruments as well as plug-ins and effects has surpassed their real world counterparts. Now all forms of music production come under one umbrella, and it's afforded us luxuries I never would have dreamed possible."

3. Extended Life Expectancy. Some of us still have mixes from our mid-Nineties Pro Tools III rig that we can recall, playback and rework with full automation. We don't have to bake any tapes, find a compatible tape deck and noise reduction, rent an odd-format digital deck, or find a specific console and spend a lot of time resetting knobs into the correct positions. (Okay, we may be missing a plug-in or two from the era, but nothing that cannot be re-created.)

ICON's predecessor, ProControl[®], still remains a viable mixing solution, and has a strong trade-in value against a D-Control[™]. Many digital console systems have come and gone since ProControl was released in the late-Nineties; several of them are now largely boat anchors. After more than a decade and several TDM hardware releases, ProControl is still supported. Not only that, but what other console still receives new features? This legacy bodes very well for ICON Series consoles, and means that users can expect a long life from their investment.

Toshiro Tannai, Mixer Fujisoft Akiba Studio: "We were able to replace the Pro Control [with an ICON D-Control] without a hitch and were back up and running the next day."

Ezra Dweck, Re-Recording Mixer and Sound Supervisor: "In July 2005 I mixed a low-budget film on a ProControl. Almost a year later, to the day, [the producers] came back to replace music cues. We took the [Pro Tools] session with the replacement music to a completely different stage - this time with an ICON. I replaced five reels of music, conformed and mixed it in about two hours and was ready to print master. There just isn't another system that you can expect to recall a year old mix with all the elements in a completely different facility."

John Rawlings, Technical Director, Scramble UK: "Over the last three years the ICON has proved itself to be very robust. We can't see any other console in the current marketplace that we'd rather have."

4. Core Curriculum. Because Pro Tools is now the industry standard format for recording, sound editing, post editorial and media interchange, our educational system has responded by making the DAW its curriculum of choice. Students learn not only to edit but also to mix on a Command|8® or a C|24™ control surface - this is the same basic language of mixing on an ICON. Latch mode is the same on both, for example; the similarities continue, which cannot be said of other automation packages.

Even if a student has an opportunity to work on a large-format digital console, it is unlikely in their first few years of experience that they'll be mixing on that specific system. However, it is far more likely that they'll be mixing on some form of Pro Tools-based platform and, therefore, will be more familiar with the ICON. In fact, since its debut in 2004, D-Control and D-Command® have become the fastest selling large-format consoles ever.

Steve Miller, Los Angeles Recording School: “As educators, we have to be conscious not only of the current state of technology, but of what things will look like ten years from now. *The ICONs are, for us, a long-term investment in tomorrow’s technology.*”

Chris McKeith, Instructor, Australian Film, Television and Radio School: “The Dual-operator ICON D-Control offers (us) some real training advantages. These include offering students *‘real world’ training using cutting-edge technology*, [and] the ability for the student and teacher to dual operate the ICON side by side at the console.”

Seiji Tanaka, Engineer, MBS Production Tokyo: “Since we were already fluent in using Pro Tools, we were able to start working with the ICON immediately, without any prior training. Working with plug-ins, writing automation, controlling the mix – it’s all very easy because of the ICON’s ergonomic design.”

Bill Smith, Recording Arts Director, Full Sail: “ICON allows us to tailor the work surface on a day-to-day or even class-to-class basis. Sitting at the same ICON every day while it’s being reconfigured for all these different tasks -which would require moving from one room or building to another with traditional consoles – makes students all the more comfortable in learning these new tasks.”

5. Customize Your Mixing World. Sound engineers have always been driven to add functionality to their consoles to gain additional control and flexibility of their mixes. What started as simply level and mic pre control, soon became long channel strips with EQ, panner, dynamics, assignable busses, and all the rest, culminating in mammoth, expensive desks equipped with multiple pre/post sends and 48 or more busses.

With the advent of Pro Tools, the virtual console has evolved to become an extremely customizable and capable mixer. Usefully, Pro Tools was laid out to mimic the signal flow of an analog desk, allowing mix engineers, producers and composers to build their ideal routing, parallel-compression "mults," stem recorders, effects sends and returns and the rest. With 128 available busses, 160 aux channels, MIDI channels, VCA masters, 10 inserts, 10 fully independent sends, master faders, stereo and up to 7.1 surround-sound outputs, and more, the Pro Tools|HD Mixer has grown in just a few short years and is, in most people's mind, the definition of a "custom" console.

ICON/Pro Tools has evolved to a point of literally "As fast as you can think it, it's done." With the advent of Pro Tools 8's Satellite Link and the relatively new Multi-Mode on D-Control, users can now connect and control up to five Pro Tools|HD rigs to offer more than 1,900 tracks, 640 busses and 800 aux channels.

By their very nature, D-Control and D-Command tactile controllers are fully customizable. Any channel can be slid anywhere you want it with the jog wheel. Any group of faders in any order can be laid out with a push of a button; any group of knobs and faders can be custom mapped to show/layout a plug-in just the way the user wants it. Such maps created on an ICON can be exported and shared with fellow mixers.

Glenn Rosenstein, Owner/Engineer/Producer: "The D-Control's integration with Pro Tools is a relief; our workflow has been improved remarkably with ICON. Being able to configure and reconfigure ICON's open architecture in a matter of seconds is where the D-Control really shows its value."

Brian Scheuble, Engineer, Mixer and Producer: "The faders, the whole tactile feel of the ICON is smooth and responsive. But what's really impressive is how adaptable the board is to whatever I'm doing. I can organize a mix any way I want, and I've got total control of every parameter."

Scott Weber, Re-recording Mixer Disney Studios: "With the ICON I can set up custom mix templates for every type of job that comes through our studio. From a simple trailer mix, to the most complicated TV and theatrical effects mix, I am able to create a mixer that fits the specific need of all my projects. ICON gives me the ability to pull off even the most complicated mixes, and give me the creative control that today's projects demand."

6. Sound Quality. All this flexibility and functionality would be for nothing if it sacrificed sonic integrity. In the early days of TDM mixing, some people argued that the resolution suffered from files being only 16-bit wide (but with 24-bit summing). With the advent of Pro Tools|HD in 2002, the engine was upgraded to 24-bit files with a 48-bit summing bus. Which means that it is now nearly impossible to clip and distort the internal bus, and that the architecture offers nearly 300 dB of dynamic range - well above even the most expensive analog consoles).

And to answer any urban myths and voodoo talk still persisting about Pro Tool's sonic integrity, in 2007 Digidesign held a series of impartial tests that compared a mix made on a well-known analog console with duplicate "in-the-box" Pro Tools mixes using Waves SSL EQ and Dynamics plug-ins. The results were phase inverted to match. Three different styles of music were chosen, and mixes distributed in person and via the Internet. More:

<http://www.digidesign.com/index.cfm?navid=49&itemid=25669&langid=100>

The outcome was amazing. Of the tests I conducted in person with the full quality 24-bit masters, the average score was 45% correct identification of a switch between the analog mix and the digital Pro Tools mix. When asked which mix was which, 55% of the respondents chose or guessed incorrectly that the Pro Tools mix was the analog mix, or vice versa. The conclusion is that close to 50% of the time people could have been randomly guessing and done just as well.

Rob Macomber, Chief Engineer Jazz at Lincoln Center XM Radio: "Obviously it has to be recorded right, [with] proper gain stage and everything, but— this system captures that *amazing clarity and recreates it without coloration*. All I have to do is push up a fader, I don't have to turn a knob and it's like 'wow that sounds amazing' and that's how it should be."

Seth Presant, Engineer/Mixer: "I think that much of the criticism of mixing-in-the-box has come from those who haven't done it much. It CAN sound big! It CAN sound great! It's all in how you use the tools."

Conrad Pinion, Chief Mix Engineer Margarita Mix Hollywood: "Everything's getting better: the quality of the sound, the intuitiveness of the ICON surface, the integration of video ... all of those elements make us more creative people."

Tchad Blake, Engineer/Producer, on winning the Grammy® for Best Engineered Album in 2008: "I'm really happy about this recognition, especially because it's proof that you can do it 'In the Box.' For me, it's the only way to work these days. Pro Tools and ICON have completely changed the way I mix."

7. Speed and Control through Automation. Once upon a time, the engineer, producer, artist and janitor needed to put their hands on the console to perform fader moves at exactly the right moment in time to make a great mix. If anyone missed a single move, you either had to start over or edit the master tape. Fast forward to the current level of ICON/Pro Tools|HD automation, which features not only moving faders, but touch-sensitive knobs, plus automation of not only volume, but pan, mutes, sends, EQ, dynamics, effects/plugin-ins, returns, masters and VCA groupers.

But this, of course, is not even close to the whole story. Automation can also be tied to audio regions - or not – making ICON the perfect system for dealing with the dreaded, Big CHANGES. For instance, if you want to delete 22 frames from a scene that is already automated/mixed on a traditional console, chances are you'd give up and just mix that section again. Not with ICON - simply turn on Automation follows Audio and do your conform. Because these functions are integrated, they happen together and you're done.

In the other scenario, consider an ADR line on which you've already spent a bunch of mix time with volume, pan and EQ automation. Now the director changes his mind and wants another ADR take in its place. You simply turn off Automation follows Audio and keep your automation in place while dropping in the new line.

Of course, ICON offers traditional real-time mixing features that allow you to completely mix without the mouse and even without the Pro Tools screen. Features like Auto-Join, Join, Capture, Snapshots, Punch Capture, Touch-Latch and many more are derived from industry-standard automation that has evolved over the years, all of which makes ICON a perfect blend of the best of the traditional and innovative new automation ability.

Glenn Rosenstein, Owner/Engineer/Producer: "ICON's automation certainly speeds workflow, because you get to do more than one task at a time – to say nothing of custom faders, which get you deeper into automation more quickly. Custom Faders is one of the best features of the ICON."

Luc Fontaine, Owner, Studio La Majeure: "The automation and Recall [of ICON] are more than just conveniences; they allow us to spend less time focusing on technical issues and more time on creativity. That gives our clients a better product. For us, the ICON is the best of all possible worlds – a great analog front end, a powerful 5.1 surround mixing tool and the best control of Pro Tools".

Marty Frasu, Technical Engineer for Composer David Newman: "This has the best automation system of anything anywhere."

Sherry Klein, Re-Recording Mixer: "There isn't anything that you can't do at this stage with Pro Tools and ICON."

8. Ultimate Recall. Prior to Pro Tools, recalling a mix or matching into a scene from a movie at a later date was nothing short of miraculous. ICON and Pro Tools|HD recall everything in a matter of seconds, and you can take complete sessions with you to London, Paris, New York, L.A., the Moon ... anywhere you want to mix. Or you can send it to multiple people to mix over the Internet, and they can return just the session file for you to further tweak their mixes.

ICON is a truly revolutionary, game-changing enhancement to the world of mixing. It buys back hours and days of our creative lives; it saves mental gyrations and insane amounts of stress and worry, because you know that one day, one week, one month, one year from now you will be able to be exactly where you were when you left the project. (Not to mention that your client will love you for it!)

It is extremely liberating to use computers for what they do best: remembering data with incredible amounts of detail and exactness. The Auto-save feature is a fantastic net on which to mix, with the ability to jump back several minutes or even hours and change your mind. All of this explains why the console of the future incorporates Ultimate Recall.

Andy Johns, Engineer/Mixer: “It’s so much easier because, with any analog mixer, when you do recalls, they never come out perfect. *But with ICON, BANG – you’re right back where you were instantly!*”

Jordi Soler, Studio Owner, Girona Spain: “We were used to never ending mixing sessions with analogue consoles. *The ICON system is the best invention that could ever land in our studio.* The ‘Ultimate Recall’ option and the surround panner really allow us to have a dynamic studio agenda.”

Steve Miller, Los Angeles Recording School: “Even people who have the budget and space to use a large-format analog console are discovering that they end up sub-mixing on the [analog] console, but ultimately wind up mixing ‘inside the box.’ *It makes so much more sense to work with a fully integrated control surface like the ICON.*”

Seth Presant, Engineer/Mixer: “The ability to instantly recall entire projects when mixing in the box saves me immeasurable time. It’s never a problem to accommodate the ‘Oh, there’s one other little thing on that other tune that I’d love to fix’ comment that always comes up. As a result, you never feel like you have to settle. I also find that being able to move so quickly between songs seems to help keep mixes more even from song to song.”

9. Work Lean and Green. The console of the future will be very energy efficient; the console of the past was never turned off, sucked a tremendous amount of power and required a tremendous amount of cooling.

Consider the example of a well-known analog console whose audio PSUs each require two 30A circuits while the logic/fader motor PSU needs a single 25A circuit, for a grand total of 85A. A dual-operator ICON 48-fader D-Control requires only one 20A circuit, less than 25% of the analog console's power draw. (We do not need to include the Pro Tools|HD rig in this comparison, since it would also be used in both examples.)

With ICON, no one recommends leaving the console on 24 hours a day - the system boots in seconds. All told, clients that have switched from some sort of large-format analog console confirm savings in the \$500 to \$1,000/month in electric bills.

ICON and Pro Tools are Restriction of Hazardous Substances Directive/ RoHS-compliant, a standard created by the European Union to restrict the use of six hazardous materials used in the manufacture of various types of electronic and electrical equipment. RoHS and other efforts to reduce hazardous materials in electronics were motivated, in part, to address the global issue of consumer electronics waste.

Bruce Botnick, Engineer/Mixer: "If you've spent numerous hours sitting at a modern 100 input analog desk, you've experienced the heat that the console can generate, it's like an oven and your legs are what are baking for dinner while the rest of the control room is freezing. The D-Control is a welcome addition to the control room in that it is just a control surface, though I do admit that during a heavy winter storm a big hot desk is your friend.

10. Pro Tools + ICON = Integrated CONsole. Because ICON stands for Integrated CONsole, it is inherently advantaged over any other mixing platform. As the name indicates, our combination editor/recorder/composing/video playback tool is completely integrated with a fully touch-sensitive, configurable/customizable surface. ICON handles many tasks that weren't even thought of 10 years ago, as well as many things you can't achieve on other, non-integrated consoles.

In the old world - 15 years ago - consoles, patch bays, tape decks, outboard effects, synchronizers and video decks were all islands of independence. Getting them to work together was cumbersome, expensive and difficult. The patchbay system alone could cost around \$20k and take weeks of wiring time to complete. In essence, a studio system was integrated via the human brainpower needed to glue it all together. Workflow was extremely slow - who remembers manual recall and rewind time? – and, oftentimes, brought to a dead stop.

Today's client is much savvier and expects a great deal from the studio experience. Facility owners and operators that can be nimble on their feet and drive the cutting edge of technology will expand their capabilities, their creativity and therefore their client base. An integrated solution provides those and other advantages - yet another reason why ICON is the console of the future.

Luc Fontaine, Owner, Studio La Majeure: “The ICON has made a tremendous difference in the way we work. Because ICON is so well integrated with Pro Tools, we are able to substantially streamline our workflow in mixing for music and film.”

John Luis, Chief Engineer, ABC Television: “ICON is the console of choice because it was created by the same company who created the other software/hardware to work as a team. It wouldn't make sense to use anything else.”

James Michael, Producer/Engineer/Songwriter: “With ICON, I can edit and mix from a hands-on producer's perspective. *It's all one integrated process... The ICON helps me make better mix decisions. I have no desire to ever go back to an analog console.*”

John Paulson, President Talking House Productions: “We needed efficiency, speed, flexibility and the ICONs gave us that. From my perspective I wanted to make sure that we were investing in something that was the cutting edge but at the same time had already shown that it was a well integrated system.”

Conclusion – Tomorrow’s Studio Today: I was very lucky to have been a part of the analog-to-Pro Tools revolution that, for me, started in the early Nineties. It is easy to be fascinated by breaking technology barriers - we humans tend to become addicted to that excitement and seek it out. When a better way comes along, it’s obvious and undeniable. There are many reasons why Pro Tools has become the industry standard as a recorder, editor and session format.

A number of people have told me that they need to learn ICON because the system is definitely here to stay, and they don’t want to be left behind. There have been so many seismic shifts in the audio industry during the last several years that many people are re-inventing themselves and trying to make a place in the future. Many can no longer afford the luxury of being just a music mix engineer. Therefore, maybe most importantly, ICON provides the flexibility for any music, post, commercial or film project to be opened and worked on at any moment.

A console system that lets users expand their horizons is a very good thing. A console system that can transform itself into so many different configurations so quickly allows a user to transform themselves just as easily, as quickly and therefore remain current. So many more innovations await ICON and Pro Tools, making it truly the Console of the Future.

John Bidasio, President, Westwind Media: “Six of our engineers went for a demo session on the ICON D-Control ES and they all came back saying: *‘This is it – this is the next step in mixing technology’.*”

Greg Geddes, Mixer/Owner, Back Lot Music: “Over the years, we always felt we had an advantage embracing Pro Tools as our workstation, and eventually our mixing engine. The advantage was a better, more effective way of doing things, including cost-effective alternatives to traditional methods of producing audio post. There is every reason to think that this trend will continue.”

Toshiro Tannai, Mixer, Fujisoft Akiba Studio: “What we appreciate most about the ICON is that it functions just like a traditional console. Most operations can be done without even looking at a monitor display. This allows us to focus on the sound quality of our productions and spend less time concentrating on technical matters.”

Richard Casals, Technical Manager Sonoblok Spain: “ICON is the logical step forward. All functions are easily accessible and intuitive. ICON is so efficient and cost-effective that it has helped us expand the appeal of our studio.”

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