

MATRIX

BUILDING A BIGGER, BETTER, BRIGHTER CONSOLE



It seems that touchscreen technology is everywhere today, part of our lives from when we wake to how we work to how we like to unwind. Although Matrix has been providing touchscreen consoles to the fitness industry for years, we thought the dawning of a new decade was the right time for a leap forward in the technology. With our Touch and Touch XL consoles, we set out to exceed the industry standard by developing an exercise-friendly experience that mirrored familiar app-based smartphone and tablet interfaces and continued to get better with free software updates.

LISTENING & LEARNING

We started by visiting our customers at fitness facilities to find out what they liked and what they didn't like about existing touchscreen consoles. Though the flashy technology definitely grabbed the attention of members, less than 50% of the fitness industry had adopted the touchscreens. This was largely because the experience was not always what members wanted it to be. In some cases, members had trouble with the learning curve, feeling like they had to discover the ins and outs of each different interface every time they exercised. In other instances, members never accessed the full capabilities of the console, simply pressing go and starting a basic workout because they

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didn't know there were other options. In this sense, they were getting no more out of the experience than they would with a traditional LED console. Existing consoles also lacked adequate stabilization and sweat proofing. Even slight shaking made it hard to focus on the screen during intense workouts, and moisture caused damage to both exterior controls and interior hardware. Additionally, service technicians struggled with existing touchscreen consoles. They were difficult for one person to install on the frames of cardio equipment, with technicians commenting that they needed three or four hands to get the job done. Furthermore, the consoles were difficult for technicians to service without removing them from the cardio equipment and disassembling them, and this led to significant downtime. And finally, existing touchscreen consoles didn't accommodate set-top boxes for cable TV very well, which are common in the United States. In short, there was ample room for improvement when it came to touchscreen consoles.



SOLVING THE SERVICE DILEMMA

With the invaluable feedback of our customers in mind, our technology team got to work. The first group of challenges we took on were the hurdles faced by service technicians. Our engineers began by developing a console mounting system that let technicians simply place the console on the frame where it sat securely while they finished installing the bolts. We also added a service panel to the back, so that if something needed to be repaired or replaced, it could be done quickly and easily while the console was still mounted to the equipment. This limited downtime while streamlining the service technician's job. Next, we eliminated as many grooves and seams as possible, both to make cleaning easier and to ensure our new touchscreen consoles were completely sweat-proof. We even added a fan

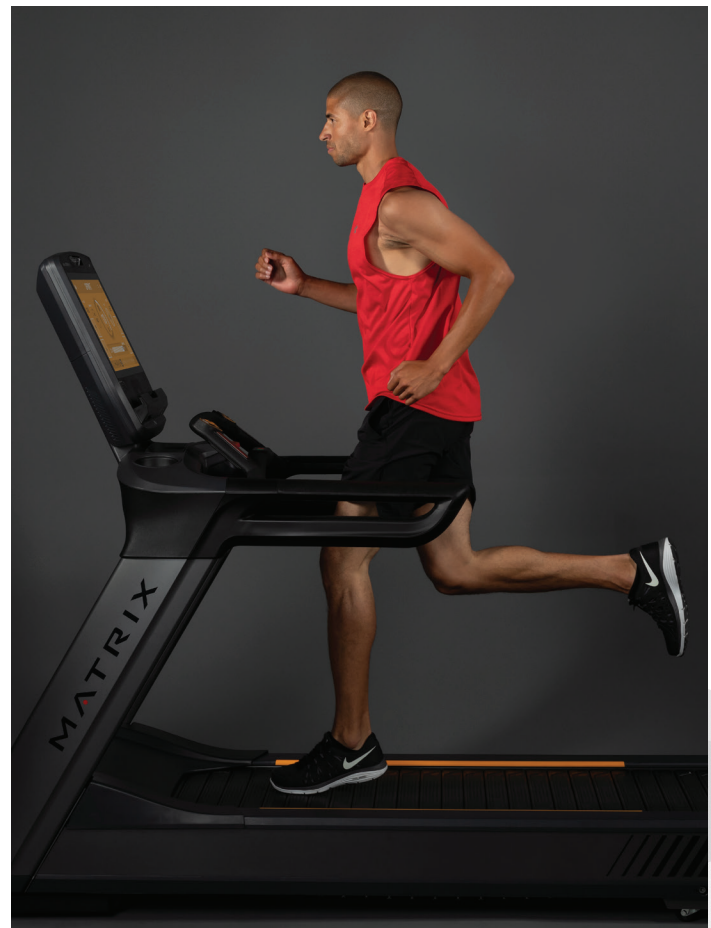
that was four times more powerful than what was offered in previous consoles, and thanks to the ingenuity of our engineers, we managed to do it all in a design that's sleeker and slimmer than anything that came before it in our product line. Finally, we developed an alternative back cover for our consoles that could hold the set-top box for cable TV. Previously, set-top boxes would often have

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DESIGNING FOR BODIES IN MOTION

We also had to consider the experience of the end user. First and foremost, we had to reinforce our cardio frames to ensure superior stability, so exercise enthusiasts could take on an intense workout with no wobbling or shaking. Next, we brought in people of all sizes and abilities to experiment with the fixed height of the console and its distance from the user. In this task, we both interviewed our test subjects and recorded their interactions with the console. This was important, because though some of our smaller users said the controls were comfortably in reach, the video of them exercising showed them struggling to make adjustments. We also needed to make sure users would not grab ahold of the console when exercising at extreme inclines or at high intensity, so we added convenient and comfortably contoured touchpoints to the frame that they could use for stability. We also adjusted the angle of the IR sensor so the console would immediately come to life when the user stepped onto the equipment, no matter what their height. Finally, we tinkered with the angle of the console itself, adjusting it by a matter of degrees to minimize glare in bright environments. We finally found the sweet spot in a more vertical configuration than we had initially considered. In addition to minimizing glare, it also provided a more natural and pleasing viewing angle for the user's eye. Perhaps most importantly, our new touchscreen consoles made room for another type of touchscreen technology — the end user's smartphone. After trying a variety of clips and brackets on the built-in reading rack and finding them too fragile for constant use, our design evolved to include a wireless charging pad that used rubber bumpers to hold smartphones securely without scratching their screens. We also developed a reading rack with a notched design that maximized the visibility of the user's personal device. This meant exercise enthusiast could now keep their favorite personal devices in reach and in view, charging them while they got a great workout.

to be placed on the ground or otherwise awkwardly arranged. To the delight of facility owners, this new feature eliminated the clutter of set-top boxes on the ground and contained the cables, creating a much cleaner aesthetic on the cardio floor. Yet service technicians and facility owners were not the only people we needed to think about.



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REFINING THE INTERFACE

With all of this reimagined hardware coming together, our user interface (UI) team still saw room for innovation in the way exercise enthusiasts interacted with our touchscreen consoles. When it came to buttons on the console, they prioritized the buttons used most by placing them on the side of the screen where the user could brace their hand to make quick changes. For a consistent user experience, our UI team made sure the physical buttons on the frame and the touchscreen buttons operated in the same way, allowing exercisers to press-and-hold to make quicker adjustments. They even used the same icons on the touchscreen that users were accustomed to seeing on fitness equipment. Next, our UI team wanted to find a way to let facilities promote specific programs or a variety of available programs. Our design team came up with an interface that was as easy-to-navigate as a familiar smartphone or tablet homepage, while also incorporating elements of design reflective of popular streaming services. This allowed managers and owners to choose exclusive workout programs to showcase on the go screen like a new movie or trending TV show, and the featured programs could be changed at any time. The go screen design also meant exercise enthusiasts could start a fresh, challenging workout immediately, or easily dive deeper to see what else the console had to offer. Our UI team even pinned a sidebar menu to the screen, so users could always

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access what they needed without navigating away from the screen they were on. The ultra-smooth design of the interface made it easy for users to connect their own devices, whether that meant their smartphone, wireless headphones, wireless heart rate monitors or even their Apple Watch. In the end, our team created a flexible, powerful interface that works with each user’s unique tech ecosystem.



MORE THAN A TOUCH ABOVE THE REST

Now available in Touch XL (56 cm / 22") and Touch (41 cm / 16") sizes, our new consoles are a hit with the commercial fitness industry. When we first showed them to some of our customers, they were thrilled with the feature-rich experience, the dazzling high-definition screens, the easy navigation and the flexibility to work with the unique needs of their facilities and the people they served. Our partners also showed great enthusiasm for the practicality of the service features, the superior stability when compared to competitive products and the unexpected extras like the wireless charging pad and free software updates. Perhaps best of all, our Touch Consoles are not just popular with upscale fitness facilities — they're often paired with our Lifestyle Series cardio equipment, bringing entertainment and immersive workout programs to light-use facilities like multi-family housing complexes, hotels and resorts. Wherever fitness enthusiasts find our Touch Consoles, we're proud to offer them an exercise experience that's more than a touch above the rest.

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