Technical Article

Put Your Best Face Forward with the Simplehuman Smart Mirror

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One of simplehuman's philosophies is that if we can make a product better and more efficient, then we do. When we looked around for a well-designed, well-lit vanity mirror, we realized that there was nothing adequate available in the existing beauty market, so we decided to design our own. We added a few of our signature touches including sensor activation and upgrading the light quality, among other improvements. Now, with the introduction of our wide-view sensor mirror, we've added another enhancement – Wi-Fi® connectivity.

1. What Is the Simplehuman Wide-view Sensor Mirror?

The simplehuman wide-view sensor mirror is a lighted vanity mirror that has adjustable side panels, enabling users to view themselves from any angle. It has LED light strips that automatically illuminate as your face approaches with a tru-lux light system that simulates natural sunlight – which is proven to be the best kind of lighting to view makeup in. This way, the user can make sure their makeup is color-correct as well as applied evenly.

The mirror is also app-enabled – the first of its kind. Through the companion simplehuman app, users can adjust the lighting on the mirror with a variety of preset light settings or capture ambient light from different locations to recreate the same color temperature and intensity on your mirror. This allows the user to get a preview of their makeup in less than ideal light settings and therefore be able to make adjustments before going out in that light.

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2. What Makes the Wide-view Sensor Mirror Stand Out from Its Competitors?

The wide-view sensor mirror is truly the first “smart mirror” designed with useful Wi-Fi-connected features that enhance the product. There is no other mirror like it on the market. The tru-lux light that we developed for our entire line of sensor mirrors has 600 lux and 90 CRI (color-rendering index), more than twice that of our competitors’, and is as close natural sunlight as you can get. It’s a better, brighter, clearer light. But, if you wish to adjust the lighting to your liking or view yourself under less than ideal light settings, you can do that as well. Users can take a photo through the app, which grabs relevant information, such as light brightness or color temperature, and transfers data through our cloud-based server to reflect the same light onto the mirror. The optics design of the mirror ensures that light will illuminate evenly across the mirror so there’s no light loss or hot spots.

3. There Are Many Wireless Connectivity Technologies on the Market. Why Did You Choose to Integrate Wi-Fi in the Wide-view Sensor Mirror?

We wanted to give the user more control over the way they could use a vanity mirror. Offering one kind of light can be limiting, especially if you want to see how you might look in less than ideal lighting situations. Connecting them through the app and Wi-Fi gives the user this flexibility in a seamless, user-friendly way – and it’s easy to control from almost anywhere in the world. Wi-Fi also allowed us to maintain our product clean button-less aesthetic while giving the user total control.

We chose to implement the SimpleLink™ Wi-Fi CC3200 wireless MCU in the wide-view sensor mirror due to its superiority as a single-chip solution. The CC3200 device provided us with the optimal balance between performance, development time and cost while maintaining a small footprint. Compared to other Wi-Fi processors we evaluated, we immediately saw that the CC3200’s SDK is very well documented and included a lot of different examples and protocol libraries which would help expediting the evaluation and development time significantly. All this made the decision to move forward with the CC3200 very easy.

4. Where Do You See Your Technology/solution Going in the Next Five Years?

As a fast-forward company, simplehuman is continuously working on creating new innovative connected products while still meeting the high standards our consumers have come to expect. We’re always conscious of making sure we design products with enhanced features that make sense and add value, not just for the sake of innovation. We also see our connected products in the future as being able to talk to each other in order to enhance the consumer’s overall experience.

For more information, visit:

- TI’s SimpleLink Wi-Fi solution
  - SimpleLink Wi-Fi CC3200 wireless MCU
- simplehuman wide-view sensor mirror
  - http://www.simplehuman.com/wide-view-sensor-mirror

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