Finding Form for the MapJack

One of the fundamental benefits of 2D/3D CAD and 3D modeling is the ability to view the model from any angle to truly appreciate the form and identify areas that can be improved before the part is built.

When Quigley Design, a UK-based product design company, was approached by Tech-Aid Limited to develop the enclosure for the MapJack, a radical new patented electronic tool for IT network testing, they knew what they wanted: A product that would stand out from the crowd, exuding quality and enhancing the appeal of the product.

To keep costs down, and to speed decision making, the design was developed through regular emails to the customer of Viewpoint format models exported directly from Cobalt™ 3D modeling software. “At first we sent daily files for review, but as we finalized the detailing we went to several exports per day,” Quigley said.

“When time is tight (as it always is) we turn to Cobalt to create concepts. There’s no faster way to create the initial geometry.”

“Tech-Aid appreciated working in this way as they could see the product from all angles. Cobalt let them use the same files to finalize the PCB layouts and liaise with toolmakers and backers.” The Mapjack looks simple but it is actually a very challenging shape to define with many curved surfaces and edges. “Although you can create forms like these quickly, you always have to remember that it will be changed regularly, and that at some point, you need to be able to export the data into a toolmaker’s CAM system.”

“The range of tools available in Cobalt lets you create data that is accurate, editable, and exportable. Unlike other systems, Cobalt lets you easily mix and match surfaces and solids—all with full associativity built in. We also find that Cobalt will handle blends and shelling operations much better than a lot of other systems we use. This was certainly the case with the Mapjack.” After completing a series of rapid prototypes—complete with working electronics, the Mapjack is now ready for production.