



How to Add Mixed Media to Your Apparel Business

An in-depth look at the mixed media technique, from art considerations through production.



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Sometimes to win the sale in this competitive marketplace, apparel decorators need all the advantages they can create. To avoid a price battle with other shops, adding credibility through technique and diversity can be enough to capture a customer's business. It is important apparel businesses take pride in marketing what they do best, and the more services they do best, the more they can promote and gain that extra advantage over competitors.

Mixed media is any decoration technique that includes two or more different decoration applications. One common mixed media technique is screen print and heat transfer vinyl. The following will focus on mixed media using digital decoration

and embroidery, as digital applications are fast and easy to incorporate into any small or large custom decoration business.

Mixed media opens a whole new unique and creative space that can be completed in house, and it offers customers that extra flair they may be looking for on special projects. This technique is especially popular for uniforms and attaching applique to jerseys. Mixed media is also used quite a bit in the first responder market, where an embroidery applique can be added to a heat transfer patch. With endless opportunities for creativity, mixed media enables apparel decorators to further master their trade, increase their skills, diversify offerings, and make more money.



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registration and alignment issues on the embroidery side.

There are currently two types of embroidery systems that allow mixed media for registration of print/embroidery. An embroidery software positioning tool allows users to find a printed position and match the embroidery design to it. Some use a camera to scan the whole printed image. While this can be helpful for loose registration, it does not allow for resizing of the digitized design or fabric anomalies. It's time consuming and limiting because it doesn't rotate or resize the digitized design to match the printed variations. This can lead to misalignment issues when hooping, impacting the final embroidered results. Perfect registration should not be expected with this process, and art should be designed accordingly.

Laser alignment tools can locate two points built into the art that are chosen for registration. They reposition, match orientation, and resize the digitized art between the one to two points built into the art so there is consistent alignment. This way, when the printed design varies in size or orientation from the original digitized design, the tool makes the adjustments needed to compensate and stay in registration. This is especially useful when hooping a design, as there is no ▶

Understanding Mixed Media Equipment Needs

Before decorators can accomplish the mixed media technique, they must have the right equipment. The concept is simple in theory, but there are some factors to consider that make this process possible.

The mixed media workflow starts with the print and is finished with embroidery. Aligning embroidery to the print is not possible without specific embroidery technology. Printing on fabrics creates variables that can affect the final print dimensions. There are minor variables in print size, from factors like how the shirt was stretched on the platen and how much the garment shrank during the curing process, to potential for minor underbase misalignments. Additionally, hooping garments offers room for orientation variations and stretch. All these factors can lead to impossible



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major concern for ensuring the print is hooped perfectly square, and any variations in stretch can be accounted for. Perfect registration can be expected with this laser alignment and art can be designed with tight pinpoint overlaps of embroidery and print.

The printing side can be done several ways. If the printed design incorporates two arbitrary registration marks for the laser alignment system, any printed application should work, whether it is a screen print, transfer, sublimation, or direct-to-garment (DTG). For lower volume, full-color designs, DTG is recommended, as it offers the ability for quick adjustment, full color, and printing on a variety of media.

Nearly any DTG printer will deliver outstanding print results and similar resolution when digitally printing on a T-shirt. However, it is important to note that when considering DTG equipment, apparel decorators should select a printer that has a reputation for reliability.

Creating Art

Apparel decorators will need to

be somewhat proficient in using a graphic design program, typically Adobe or Corel, and some form of digitizing software for embroidery.

When preparing art, decorators should consider what elements they will want to embroider and make these individual layers within their graphic design software. They should start by creating art as they normally would for print. The trick is to condense the art into two layers. Though there may be multiple layers in the working art file, the print/embroidery ready-file should be broken down into two layers. One layer is for the digital print, and the other is the digital embroidery layer for digitizing.

If decorators are using the same art file for each application, sizing will be exact, so they should create the design to the size they want to print. They don't want to make any adjustments to the art once they bring it into the print driver or digitizing software.

Design the print and embroidery file together, anticipating one layer

will be used for print, and one will be used for digitizing embroidery elements. Note two arbitrary locations in the art, typically on one end or the other to assign as registration points. These will be required when decorators hoop their printed art and designate the vector laser line in the embroidery software to find registration.

The embroidery layer should be input into the digitizing software with the print layer visible but able to be hidden. This way, the embroidery elements can be digitized with the reference of the print elements visible. When it's time to embroider, simply hide or delete the print layer.

The Production Process

The print design is printed as any normal DTG application. Drag the art into the print driver and ensure the embroidery elements layer is turned off or hidden to print only the print layer. Take efforts not to stretch the fabric too much over the platen as rebound could warp the print. The embroidery vector laser alignment

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tool can help compensate for minor deformities in print but it's still best to mitigate as many anomalies as possible.

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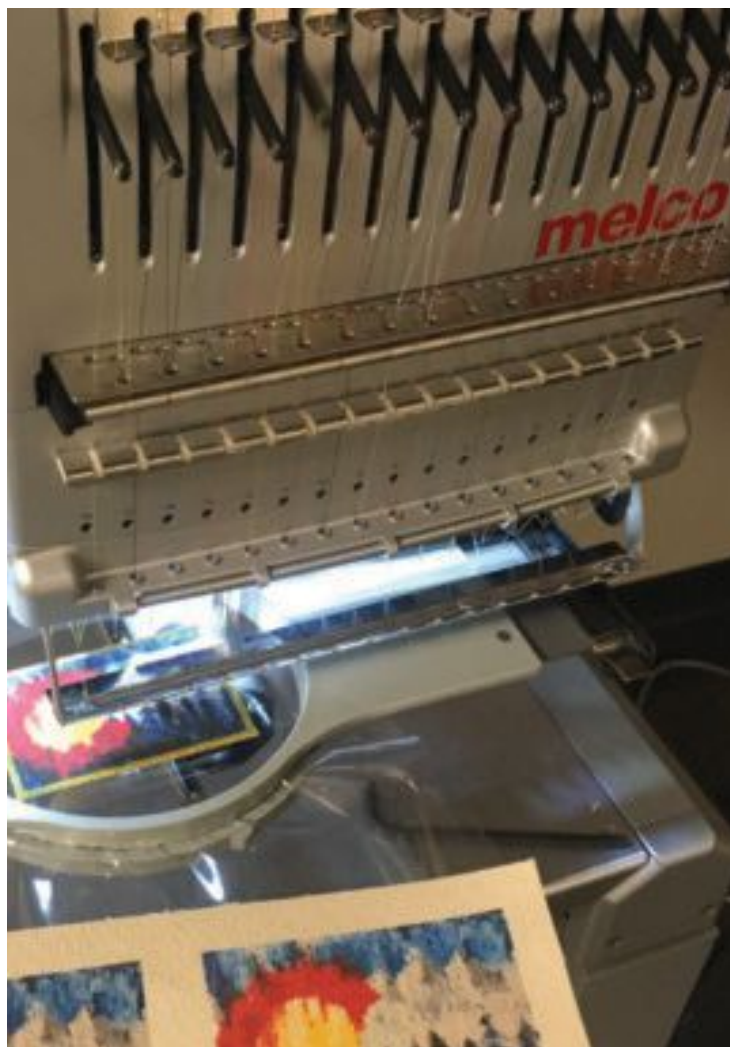
When the print is dry and complete, the printed fabric can now be hooped and prepared for embroidery. Bring the digitized layer into the embroidery software, designate the thread colors, and align the vector line to the two designated points in the art for registration.

Vector alignment is the only way to truly align print and embroidery. After loading the material onto the embroidery machine, decorators can now designate the machine to find the two registration points in the printed design. They will see the adjustments made to rotation and scale that match the print art on screen in the embroidery software. From here, decorators should see perfect alignment of their printed design for embroidery.

Note how the digitized elements align perfectly on the complex Fort Lauderdale design pictured throughout this article. Imagine trying to get that tight registration by eye. The DTG print is perfect for embroidery as the water-based ink does not crack or show open needle holes.

The application of print/embroidery mixed media is extremely versatile. The idea starts in the art, whether it includes a border around printed patches, the inside of tackle twill lettering, or highlights on a printed jacket back or hoodie, tote bags, or ball caps. All of these techniques can be done easily with the right tools and a little creativity. The only question left for apparel decorators is what creative mixed media idea will they come up with to make more money with their business? ■

John LeDrew is the digital imaging director at Melco International, an industry leader in embroidery manufacturing and digitizing software, as well as a top-tier reseller of Epson and Roland printers. Its Melco EMT16X Embroidery Machine, complemented by digital decoration printers, can help any decorator accomplish the bulk of what customers are requesting in today's market.



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