

LCI UV Tactile

Expanding the Laser Colour Inkjet (LCI) Family

Feel the Future of Identity

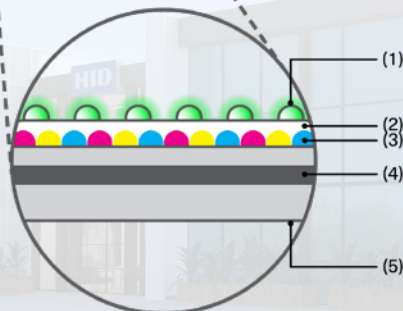
A full-colour photograph of the holder is often included in the new generation of identity documents. The LCI family enhances portrait security for polycarbonate (PC) material, creating high-quality full-colour images by combining a CMY printed image with a securely laser engraved black (K) image, finally protected by a varnish layer. The LCI UV Tactile security feature enhances the functionality of the varnish layer by introducing UV-fluorescent tactile alphanumeric characters.

By creating these tactile personalised characters in the varnish layer, such as the document holder's birth date, it is made even harder to forge the document. The tactility is detectable by touch and is hidden under regular illumination, becoming visible under reflection. The tactile fields are strategically placed to maintain portrait readability under UV light. Additionally, the varnish can exhibit different appearances when layered over the ink or PC, enhancing uniqueness and resistance to forgery.

Additional Benefits

- **Level 1 security feature** – The tactility is strategically designed to ensure it's not visible under standard light conditions allowing easy inspection of the photograph. When tilted to a more oblique angle, the feature stands out clearly for authentication. Additionally, these tactile fields can be felt by touch.
- **Level 2 security feature** – The tactile data is UV-fluorescent and therefore a second level of security and authentication takes place. The data in UV-fluorescent is distributed on top of the portrait in a way that does not compromise readability of the portrait image underneath.
- **Unique and personalised protective layer** – By personalising the varnish layer, it becomes uniquely linked to its holder. The tactile fields can show a variety of appearances over the ink or polycarbonate, depending on surface properties. This results in noticeable differences in appearance under both white and UV light, enhancing each document's uniqueness and providing strong resistance to forgery.
- **High durability** – The tactile fields have longer resistance to abrasion due to a higher usage of ink. As a result, this data offers enhanced resistance to forgery attacks, making the replacement of the top image harder. The LCI UV Tactile feature is ISO compliant.
- **Additional document protection** – The feature allows the repetition of biometrical data on top of the portrait area, adding an extra layer of security. By stacking data over the portrait, we increase protection against forgery attacks. Additionally, each layer within the portrait has unique properties making it challenging for forgers to mimic the document's intricate design.
- **Flexibility in design** – The use of DoD allows for different options in the design of the document, allowing the looks of the LCI UV Tactile to be suited to your project's requirements.

Depending on the project's requirements, the LCI UV tactile feature technology can be performed on our BookMaster- and CardMaster systems for polycarbonate identity documents.



- (1) UV-fluorescence layer
- (2) Varnish layer
- (3) CMY ink layer
- (4) Laser engraved image
- (5) Polycarbonate substrate

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