



Spectra Systems  
CORPORATION



# Activa™

Today, these drawbacks no longer exist due to Spectra's innovative Activa labeling solution. This three part system includes a labeling material, an ink and a stimulus device that combine to create robust, invisible labels that:

- do not obscure desirable graphics or typographic information
- are easily applied due to their self adhesive, linerless nature
- printable using standard industrial techniques (inkjet, flexo and offset)
- consistently excitable and readable over a normal life span

Now advertisers, direct mailers and manufacturers have a unique and inexpensive way to label, track and sort their merchandise - Spectra Systems' "smart label" Activa technology. This brand new marking system shifts from an invisible, transparent state to a visible, machine-readable code when activated by a UV stimulus.

Many attempts at creating invisible marks have relied upon UV and IR fluorescent inks to create information with high signal-to-noise ratios for easy machine detection and readout. Unfortunately, these approaches suffered from a serious drawback; they required a uniform background color in order to avoid interference with the fluorescent marking. Since graphics and printed text create non-uniform backgrounds, early efforts in detecting and reading invisible marks were severely degraded due to the absorption and reflection characteristics of the printed surface.

## How does it work?

A uniform opaque background is formed once the label is activated by a UV stimulus. While opaque, the printed information on the label can be read and decoded with standard OCR equipment currently installed on automation systems. Within seconds, the Activa label reverts back to its invisible state leaving no trace of existence.

## Adaptability to existing technology

The Activa system is readily adaptable to existing machinery where scanner-camera rates up to 3 pieces per second at a transport rate of 110 inches per second are specified.