

## TrueScan MBT-IAS



### OVERVIEW

TrueScan MBT-IAS constitutes frontline practical response to the need for high security and prompt verification of any printed document.



Banknotes, passports, ID cards, visas, applied holograms, shares, titles, permits, passes, vouchers, stamps, cheques, labels, and anything that constitutes a security document can be thoroughly analyzed in seconds with a few clicks from this sophisticated instrument concealed under an innocent mouse appearance which can be connected to a Desktop or a Laptop PC.

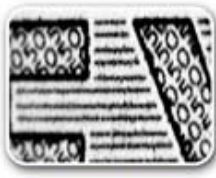


TrueScan provides the necessary light spectrum coverage, using various visible, infra red and ultra violet lights together with the proper magnification to determine whether the document is real, counterfeited or adulterated in any way.

TrueScan MBT-IAS can verify practically all overt and covert security features embedded in a document with a few clicks. Starting with the material containing embedded UV fibers; watermark; cotton texture; threads; surface integrity; security designed backgrounds; microletters; intaglio printing; engraving; relief effect; embossing; latent images; optical variable inks and devices; UV, iridescent, infrared and invisible inks; micro surgery and mechanical adulterations; cut and paste; IR ballpoint ink analysis; hologram images including embedded nano letters and de-metallization.

## TRUESCAN OPERATION

We can turn the TrueScan reader on, by pressing any of three buttons and the light source will be indicated by the external light indicators.



micro text in 50 euro



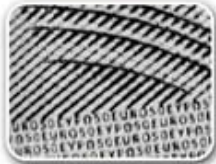
hologram in euro banknotes



In VL (visible light)/In IR (invisible light)



50 euro intaglio print



micro text

### 1. LEFT BUTTON OPERATION

The Left BUTTON with the UV indication for Ultra Violet light, turns the camera off and the four UV light sources on (two of 395 nm and two of 375 nm.), in order to analyze the document visually for UV light reflection from the so called "invisible" printed inks, paper embedded UV fibers, threads or bands

### 2. CENTER BUTTON

The Center BUTTON with the VL indication for Visible Light spectrum also, turns the camera on and shows the first color from the seven available colors and frequencies. These colors are, white, red, yellow, green, cyan, blue, magenta, after which the camera stays on without any lighting, for transparency analysis. This configuration requires a small light table (optional), where the document is placed. In addition, demetalized hologram areas as well as bands or threads can be easily verified for their particular details such as micro text or additional designs such in the Euro or US dollars threads.

### 3. RIGHT BUTTON

The Right BUTTON with the IR indication for Infra Red light, turns the camera on and shows all four top IR lights of the 950 nanometers are on, pressing the button again changes to pulsating red, indicating all tangential IR lights (880 nm.) are on. Pressing again will lit only of these four tangential light

at a time circling the objects from all four directions until it returns to the originals pulsating pink light.

## MBT IAS SOFTWARE FOR USE WITH THE TRUESCAN READER

Software application module, has the following features:

- possibility to display real time live images from any USB /firewire camera connected at different resolution
- possibility to open/save images in different formats like: BMP, JPG, TIF, GIF, PNG, WMF, ICO, EMF
- possibility to open/save images into a local MS Access database.
- possibility to digital zoom the image up to x4.
- possibility to resize/crop an image
- possibility to simulate a magnifier glass zoom.
- superimposition of positive and negative images.
- possibility to replace the white background with the black and vice versa.
- superimposition of live and stored images, in order to compare them



microtext with rule



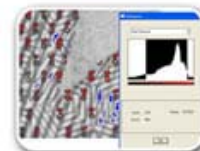
US Intaglio OVI



binary transformation



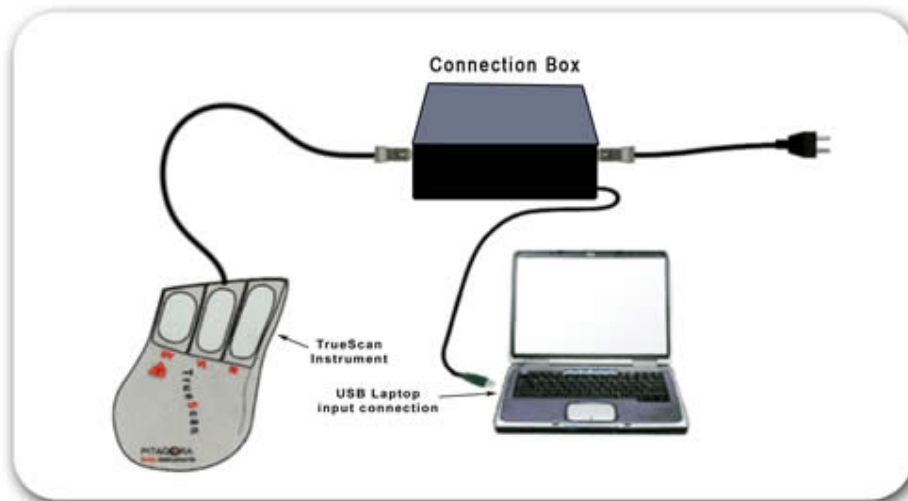
digital magnifying



select a part of hologram

- possibility to split the screen in order to compare side by side live with stored images
- comparison using an arbitrary shaped region which can be determined by mouse click sequence and can be moved freely over the document.
- possibility to do different measurements: distances, areas and angles.
- possibility to move freely the distance etalon (including the capability to rotate it in order to be aligned with image segments).
- possibility to do complete undo and redo actions
- possibility to have a complete history of operations
- possibility to mirroring and rotate the image with a variable angle(CCW or CW).
- possibility to adjust the brightness, contrast and color of the live and static images.
- possibility to make a variable superimposition on two images.
- possibility to color a grayscale image(Pseudocolor operation)
- possibility to apply an Adaptive Contrast Filter, to clarify the image.
- possibility to underline areas of interest in the image using various transparent colors.
- possibility to compute the histogram of the image and to select an area of it to be displayed.
- possibility to apply image enhancing filters: Emboss, Emboss Laplacian, Invisible Information ,Sharpen, Smooth, Mean removal, Gaussian Blur, Gray scale, Binary transform etc
- possibility to have an interactive help.

## COMPONENTS



The optional light table is particularly useful when inspecting watermarks or demetallized holograms or even threads, always in transparency mode. The unit can operate with batteries or with its power adapter.

## OPTIONS

*Optional Light table*

The product is available in two modes:

1. The Truescan Hardware together with the MBT IAS software on a laptop (a laptop dedicated for this software)
2. The Truescan Hardware together with the MBT IAS software