

IPS-7300

Image Processing System



Comparison by superimposition



Box image inside live image



Horizontal split screen



Vertical split screen



Forgery detected by superimposition.



The IPS-7300 is a full colour video processor for the simultaneous display of live and stored images.

Designed for Questioned Document Examination, functions such as overlay, addition, subtraction and side by side comparison enable easy comparison of genuine and suspect documents.



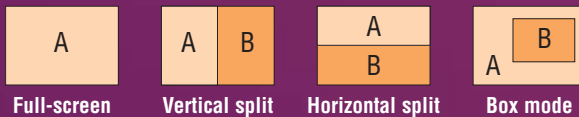
Operation

The **IPS-7300** selects one of two analogue video inputs and converts it to a digital format. All processing is thereafter carried out in the digital realm thus preserving high video quality. The digital image may be frozen in the full resolution frame store, and the output combined in various ways with the live image. The combined image is finally converted back to the analogue realm for display on your monitor.

From the front panel the operator can adjust the quality of the incoming video and the way in which the two images (still and live) are combined.

Display Modes

The following diagrams illustrate some of these modes.



(Either A or B can be live or still)

Controls

Arrow keys \leftarrow \rightarrow are used to adjust the selected parameter or to move the still image. The reset / home button returns the parameter to the normal setting.

Input Image Adjustment

VIDEO IN

Changes the video input parameters:

BRIGHTNESS

Adjusts the incoming video brightness

SATURATION

Adjusts the incoming video colour saturation

COLOUR HUE

Adjusts the incoming video colour hue

CONTRAST

Adjusts the incoming video contrast

EDGE ENHANCE

Selects one of four edge-enhancement settings

VIDEO SOURCE

Selects one of two camera video inputs

BORDER

Selects a border between the two images in split-screen or box modes.

Capture Modes

GRAB STILL

Grabs a new still image, in the following modes

GRAB mode:
normal view

The still image is not mirrored

GRAB mode:
mirror-X

The still image is mirrored left to right

GRAB mode:
mirror-Y

The still image is mirrored top to bottom

GRAB mode:
mirror both

The still image is mirrored both top to bottom and left to right.

Image Selection

IMAGE A or B

Defines image-A or B.

IMAGE A = live
normal colour

Image-A is the live image

IMAGE A = still
normal colour

Image-A is the still image

IMAGE A = both
average colour

Image-A is the average (or difference) of the live and still images

IMAGE A = grey

Image-A is grey (same colour as the border)

The live and still images may be displayed in the following modes

IMAGE A = live
normal colour

Image-A is the live image with normal colour

IMAGE A = live
normal mono

Image-A is the live image in monochrome

IMAGE A = live
invert colour

Image-A is the inverted live image in colour: both colour and luminance are inverted

IMAGE A = live
invert mono

Image-A is the inverted live image in monochrome (i.e. inverted luminance only)

When live and still images are combined they may be displayed in the following modes.

IMAGE A = both
average colour

Image-A is the average (half the sum) of the live and still images, in colour

IMAGE A = both
average mono

Image-A is the average (half the sum) of the live and still images, in monochrome

IMAGE A = both
differ colour

Image-A is (half) the difference between the live and still images, in colour

Viewing the difference between two images that are almost the same, such as a still image of a known good document, and the live image of a suspected fraud, can dramatically highlight differences.

Display Modes

FULL SCREEN

Selects static "fullscreen" A or B mode, or strobe mode:

FULLSCREEN = A

Image-A is viewed in full-screen mode.

FULLSCREEN = B

Image-B is viewed in full-screen mode.

STROBE (A)

The output alternates between Image-A and Image-B. The strobe rate, at which the output alternates, can be varied using the arrow buttons.

SPLIT SCREEN

Selects "split-screen" viewing mode and adjusts split-line type and position.

A is left of B,
split: (060)

Image-A is on the left and Image-B is on the right of the split line, the position of which is indicated in the display.

A is above B,
split: (060)

Image-A is above and Image-B is below the split line, the position of which is indicated in the display.

BOX

Selects box viewing mode (picture-in-picture).

B inside box,
at (010, 020)

Image-B is inside and Image-A is outside the box border.

SIZE

Selects "box" viewing mode (picture-in-picture) and adjusts the box size.

LIGHT

Press this button to turn the display back-light on or off.

HELP

Displays simple help text. Use the arrow buttons to select a help topic and to scroll through the help text on this particular topic.

Power:

8 to 24 volts DC,
nominal 12 volts DC @ 850mA
Plug-top PSU supplied with each unit.

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