

Sightech Vision Systems, Inc.

PC Eyebot

Tutorial – Area Default Values

Published 2005

Sightech Vision Systems, Inc.
6580 Via del Oro
San Jose, CA 95126
Tel: 408.282.3770 Fax: 408.413-2600
Email: sales@Sightech.com
Web: www.Sightech.com

New Project Default Values, these are values for new Areas that provide a generic starting point for getting starting with the vision system:

a) Decision:

- **Decision⇒Sensitivity⇒20** - This setting is compared with the score to determine the overall **Decision Status** of any given Area. This setting is often fine, but it can easily be adjusted.
- **Decision⇒Region⇒20** - This value determines, during inspection, whether Hits are going to appear on the image at all. The **Score** is calculated from the amount of these hits. This is a good general value. Lower values make the vision system more sensitive to small difficult-to-see defects.
- **Decision⇒Margin⇒3** – This value establishes a **MARGINAL Decision Status** band of 6 points.
- **Decision⇒Speed⇒Disabled** – This is actually the same as Fast. With Disabled, the # of frames Decisions are averaged over can be set in other specialized dialogs.

b) Video Processing:

- **Video⇒Threshold⇒50** - Starting point for the video threshold for Intensity comparing and convolutions
- **Video⇒Transform⇒Line** - General use edge seeking convolution. Somewhat CPU intensive, so a simpler one, such as Small, may be better.
- **Video⇒Emphasis⇒None** – No emphasis mode. For advanced use only.

c) Area based Mask:

- **Mask⇒Type⇒None** – No mask to begin with.

d) Learning characteristics:

- **Feature⇒Type⇒Square** - Provides a good BW Shape only based inspection
- **Feature⇒Fixture⇒None** - Very forgiving of X and Y movement
- **Feature⇒Size⇒Small** - Provides a small Feature size which can inspect fine detail.
- **Feature⇒Memory⇒Medium** - A medium sized memory model – good for most applications

e) Physical position of Area:

- **Position⇒Width⇒75, ⇒Height⇒75** - Good getting-started **Area** size
- **Position⇒Center X⇒50, ⇒Center Y⇒50** - Default Area is centered in image

f) Hit color:

- a. **Edit Areas⇒Modify⇒Hit Color⇒HC_BRIGHT_PINK – HC_GREEN** is often a good alternative.