LANEHAWK™ LH5000

DATALOGIC

QUICKLY REDUCE SHRINK

The LaneHawk™ LH5000 camera is part of the LaneHawk 5 loss prevention solution that turns bottom-of-basket (BOB) shrink into profits in real-time. The LaneHawk LH5000 unit detects and recognizes items as part of the transaction, making sure stores get paid for their BOB items.

The LaneHawk system solves the BOB loss problem in a way that other products cannot by including BOB items as part of the POS transaction. The LH5000 unit reduces shrink, increases revenue and is designed to pay for itself in less than 12 months.

HOW THE LANEHAWK LH5000 UNIT WORKS

The unit is flush-mounted in the checkout lane to continuously monitor items on the bottom of shopping carts. Using advanced Visual Pattern Recognition (ViPR™) software along with bar codes and Digimarc® Barcodes, the system is able to detect and recognize items that pass by the camera and then sends their GTIN information directly to the POS. Before payment, the cashier verifies the items that were found under the basket, scans those items and then finalizes the transaction. When using the LH5000 unit, the retailer is assured to get paid for those items.

A COMPLETE SOLUTION

The LaneHawk system is rugged for demanding retail checkout environments. Each LH5000 unit consists of an 'Intelligent Lighting and Camera Unit' (iLCU), an Ethernet cable and mounting hardware for each lane. The components mount on the inside of the checkstand so they are discreet and do not interrupt customer throughput. A LaneHawk server application processes the acquired images from each lane and is integrated with the store's POS controller to provide a powerful integrated solution. In addition to advanced reporting capabilities to measure and manage system performance, each LH5000 unit can easily be managed and/or maintained remotely ensuring years of reliable performance.

ADVANTAGES

- **Reduced Shrink and Rapid ROI:** Helps boost profits per lane (per day) by up to 10%, leading to a quick return on investment (ROI) of less than 12 months.
- **Integration with Your POS System in Real-Time:** No other BOB solution is able to recognize a BOB item and then automatically send the item description and UPC information directly to the POS during the transaction.
- **Flexible, Cost-effective Scalability:** The LaneHawk system leverages open, industry-standard technologies to allow you to easily incorporate next generation retail technologies into your store infrastructure.
- **Tighter Business Controls:** The LaneHawk LH5000 unit captures transaction data and BOB images to enable detailed reporting on what is going through the checkout lanes under the cart.
- **Training of Cashiers:** The LaneHawk LH5000 unit requires minimal cashier training and operates within the transaction workflow. The cashier is not interrupted until he/she is ready to process the BOB items. Productivity is enhanced and BOB items cannot be ignored.

ADVANCED IMAGING ITEM RECOGNITION

How the ViPR Software Works

- First, a database of high resolution images (called a modelset) is created containing the product packaging of common BOB items. ViPR software extracts key points (feature points) from these images to create a unique identifying pattern for each UPC, similar to a fingerprint.
- When a product passes the LaneHawk unit, an image is captured of the product and the ViPR software is used to extract feature points from that image. The ViPR software is then able to identify the product by matching the pattern of feature points in the image to the patterns of feature points stored in the modelset. These computations are streamlined to produce results in real-time.
- Digimarc Barcode digital watermarking technology and standard 1D GTIN bar codes are used to augment ViPR based BOB detections for improved accuracy.

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TECHNICAL SPECIFICATIONS

DECODING CAPABILITY

1D / LINEAR CODES	Auto discriminates all standard retail 1D codes: UPC-A, UPC-E, GTIN-14

ELECTRICAL

AC POWER REQUIREMENTS	AC Input: 100 - 240 VAC, 50-60 Hz Power Consumption: Operating (Nominal): 9 Watts
POWER OVER ETHERNET REQUIREMENTS	Complies with IEEE 802.3af-2003 Power Consumption (Nominal): 10 Watts

ENVIRONMENTAL

AMBIENT LIGHT	0-4,500 lux
HUMIDITY (NON-CONDENSING)	5 - 95%
ESD PROTECTION (AIR DISCHARGE)	25kV
TEMPERATURE	Operating: 10 to 40 °C / 50 to 104 °F Storage/Transport: -40 to 70 °C / -40 to 158 °F

INTERFACES

PRIMARY AUXILIARY PORTS	Secured USB Type A Host
INTERFACE	1 GB Ethernet (x2)
REMOTE MANAGEMENT CAPABILITIES	LaneHawk™ Admin Console allows the customer remote access to the LaneHawk camera.

PHYSICAL CHARACTERISTICS

DIMENSIONS	Depth (in Check Stand): 10.0 cm / 3.9 in Height (Outer Frame): 20.1 cm / 8.2 in Length (Outer Frame): 31.9 cm / 12.6 in
INDICATORS	Visual: Power; Network Activity (x2): IP Address obtainment, Server Connection, Optical Flow detection, Heartbeat
WEIGHT	1,250 g / 2.7 lb

RECOGNITION PERFORMANCE

IMAGE CAPTURE	1280 x 1024, JPEG 8-bit grayscale
ILLUMINATION	Multiple LEDs: Location optimized for eye comfort
RECOGNITION COVERAGE	Capable of recognizing items up to 60.9 cm / 24.0 in from glass
DWM COVERAGE	7.5 to 60.0 cm / 2.9 to 23.6 in
BAR CODE COVERAGE	14 to 23 cm and 40 to 47 cm / 5.5 to 9.0 in and 15.7 to 18.5 in

SAFETY & REGULATORY

AGENCY APPROVALS	The product meets necessary safety and regulatory approvals for its intended use. The Quick Reference Guide for this product can be referred to for a complete list of certifications.
ENVIRONMENTAL COMPLIANCE	Complies to China RoHS; Complies to EU RoHS; Complies to REACH - EC1907/2006
LASER CLASSIFICATION	VLD - Class 2 IEC/EN60825-1; Compliant with 21 CFR 1040.10 except for deviations pursuant to laser notice No. 50 dated June 24, 2007.
LED CLASSIFICATION	Exempt Risk Group IEC/EN62471

SERVER SPECIFICATIONS

SUPPORTED OPERATING SYSTEMS	Windows 64 bit: 7 Pro; 10 Pro Windows Server 2008, 2012R2, 2016 Linux 64 bit: Ubuntu 14.04 LTS; 16.04 LTS; CentOS 7
TYPICAL HARDWARE REQUIREMENTS FOR A 15-LANE STORE	CPU: Quad core i5 3.2 GHz CPU or higher RAM: 4 GB HD: 120 GB Network: 1 GB capable NIC required, two NIC's optional

VALUE ADDED FEATURES

RISK REPORTS	Risk reporting provides an audit trail to deter collusion and 'Sweethearting', providing powerful forensic data to loss prevention personnel when investigating suspicious behavior.

WARRANTY

WARRANTY	90 Days

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