



ADVANCED TRAFFIC TECHNOLOGY
COUNTS, SEPARATES & CLASSIFIES IN **ALL** CONDITIONS

Technical Sheet No. 4

Idris[®]

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AUTOMATIC VEHICLE IDENTIFICATION

AUTOMATIC VEHICLE IDENTIFICATION (AVI) VEHICLE TAG CORRELATION

This feature introduces multi-lane AVI to vehicle tag correlation within the Idris algorithm engine. The first installation was commissioned in early 2002 for E470 in Denver, Colorado, USA. The process simplifies lane controller systems and ensures improved accuracy for vehicle identification and tracking.

Idris is capable of highly accurate multi-lane tag correlation. This is due to Idris's ability to track continuously the location of every vehicle as it passes through the detection site. Idris is "spatially aware", being able to locate vehicles both in the direction of travel and laterally. This provides a system which is exceedingly accurate for Tag to Vehicle association. The tag correlation feature simplifies lane controller design and ensures improved accuracy for vehicle identification and tracking.

THE PROCESS

Idris smart loops register a vehicle travelling over the loop site and track the vehicle for the duration of its time within the site. All the data from the loop signature is collected by Idris and processed to provide a per vehicle record (PVR). At the same time as Idris is collecting the data to create each vehicle's PVR it is registering each tag read that occurs, noting the lane and time of each read. As each vehicle's PVR is being created, Idris assesses the configuration of ALL vehicles over the site at the times of all tag reads that might be associated with the vehicle of interest. Idris then determines which tag associates with the vehicle using all the spatial information available. In addition to associating each tag read to a vehicle, Idris notes the location of the read with respect to the site and summarises the read location information for diagnostic purposes. This enables early detection of bad antenna adjustment or impending failure indicated by a changed read location or high spread in the locations.

Diamond Consulting Services Ltd

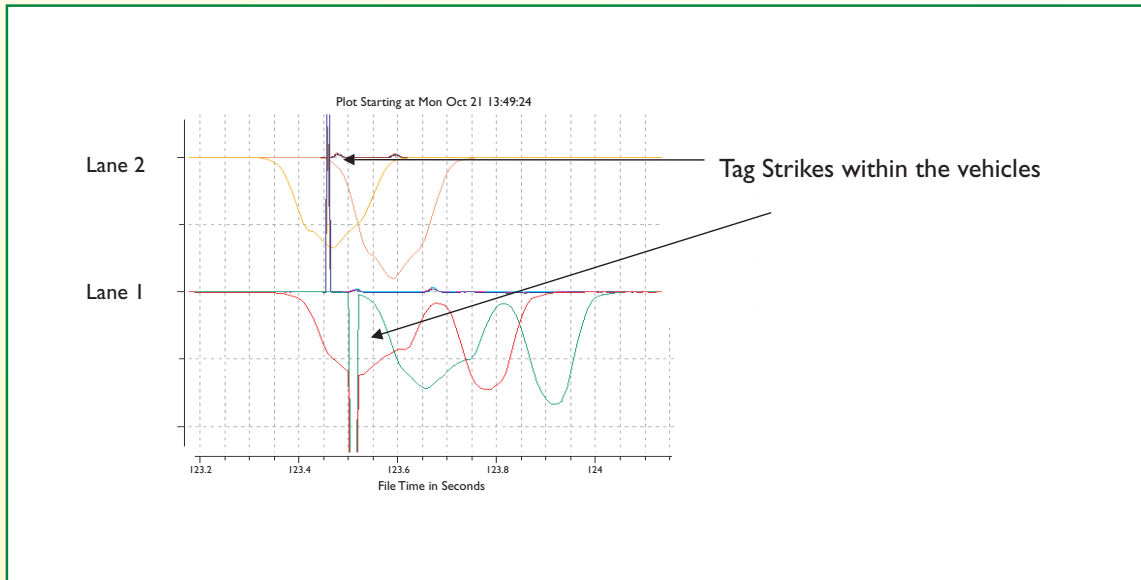
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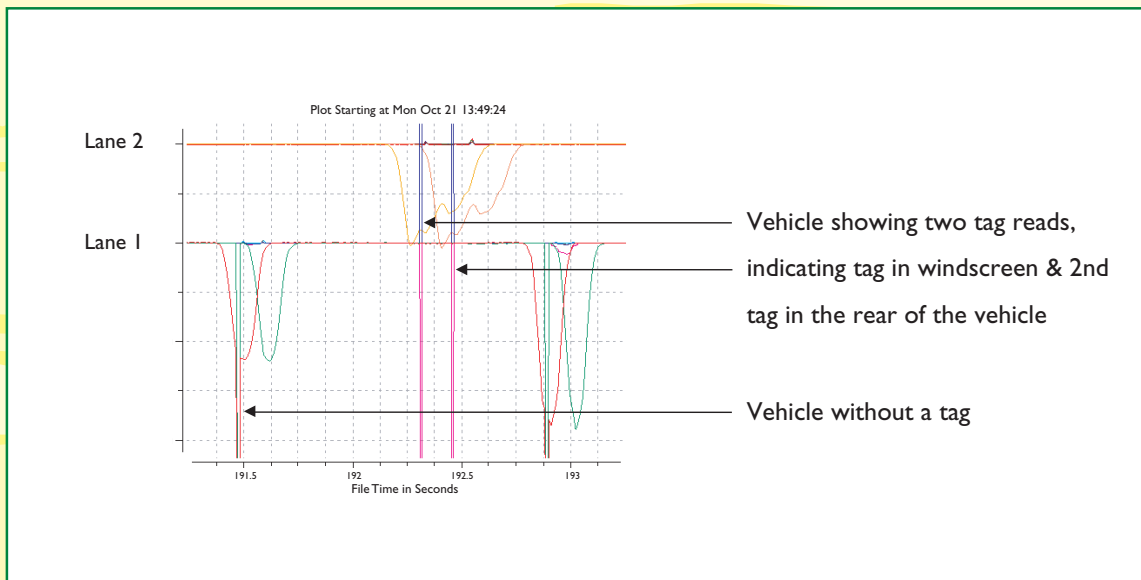


Idris® & AUTOMATIC VEHICLE IDENTIFICATION

ADJACENT VEHICLES SHOWING TAG STRIKES



VEHICLE CONTAINING TWO TAGS



The Idris Technology is protected by one or more of the following patents:

EP0879457, USA 6345228, 6337640 and 6483443

Patent Applications Pending in other Countries

Idris® is a registered trademark of Diamond Consulting Services Ltd.

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