Berla offers training in the acquisition and analysis of data from vehicle systems to forensic examiners, investigators and accident reconstruction professionals in the law enforcement and private sector communities. This training is focused on original manufacturer installed infotainment and telematics systems such as Ford SYNC™, OnStar™, Uconnect™, BMW ConnectedDrive™, Toyota Entune™, MyLink™, IntelliLink™, CUE™ and Mercedes-Benz COMAND™. This course is designed for all levels of experience and takes an interactive approach. A key component in all of our courses is to understand the technology behind the targeted systems, how they work and why they store specific data. This is critical in being able to articulate any findings and upholding them in court.

Course Overview

The Vehicle Forensics and iVe Certification course is structured to provide attendees with the necessary skills to acquire and analyze data from OEM installed infotainment and telematics systems. The skills obtained in this accredited course will enable each student to testify as an expert witness in criminal and civil litigation matters. iVe training provides a solid understanding of vehicle networks and how data is transmitted between various electronic control units stored onboard a vehicle. It will also teach the methods necessary to conduct a full forensic examination and produce a report of the findings.

The course is hands-on and will provide each individual with the experience necessary to acquire and analyze data from a multitude of infotainment and telematics systems equipped in today’s motor vehicles. Methods consistent with the best practices for handling digital evidence related to vehicle evidence will also be taught.

Course Objectives

At the conclusion of the training, attendees will have a comprehensive understanding of how to use iVe and how infotainment and telematics systems collect and store data. The course will culminate with practical exercises in which each individual will be required to apply the techniques and methodologies learned throughout training by acquiring data directly from infotainment and telematics systems. Analyses of the data acquired and report presentation methods will also be taught. The attendees will also have the opportunity to take the written exam to obtain the iVe Certification.

Course Requirements

Students may be required to bring their own laptop with at least the following specifications.

- 2.7Ghz Intel based processor
- 4GB of RAM
- 3 USB Ports
- Windows 7 Professional (32-bit)
- 1024 x 768 screen resolution

Each student will be provided with an iVe kit and license to use during the training. While this is a cradle to grave class, background knowledge in digital forensics is beneficial.
Course Schedule

Day 1

Introduction
• Infotainment & Telematics
• iVe Walkthrough

Evidence Handling
• Best Practices for Handling Digital Evidence

System Identification
• Location & Removal
• Practical Exercise

Day 2

Vehicle Networks
• Overview of Network Types
• CANBus
• Practical Exercise

Ford Systems
• Introduction
• Navigation Radio Acquisition & Analysis
• Microsoft SYNC Acquisition & Analysis
• MyFord Touch Acquisition & Analysis
• Ford SYNC 3 Acquisition & Analysis
• Practical Exercise

Day 3

GM Systems
• Introduction
• Mylink™, Intelink™, and CUE™ Acquisition & Analysis
• OnStar™ Acquisition & Analysis
• Practical Exercise

Physical Acquisition Evaluation

Day 4

BMW Systems
• Introduction
• CIC Acquisition & Analysis
• NBT Acquisition & Analysis
• Practical Exercise

Mercedes-Benz Systems
• Introduction
• COMAND NTG™ 4.5/4.7 Acquisition & Analysis
• Practical Exercise

SBC Acquisition Evaluation

FCA Systems
• Introduction
• Uconnect™ 8.4A/8.4AN Acquisition & Analysis
• Uconnect™ 6.5 Acquisition & Analysis
• Uconnect™ 8.4/8.4N Acquisition & Analysis
• Practical Exercise

Day 5

Toyota Systems
• Introduction
• Toyota Extension Box Acquisition & Analysis
• Toyota Touch & Go Acquisition & Analysis
• Practical Exercise

Volkswagen Systems
• Introduction
• RNS 510 Acquisition & Analysis
• RNS 315 Acquisition & Analysis
• Practical Exercise

Certification Exams
• Written Exam
• Practical Exam