

































Electrical Fundamentals I and Digital Multimeter Operation

Scheduled Upon Request (Factory or On-Site Availability Only)



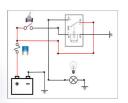
HELP YOUR TECHNICIANS TAKE THEIR ELECTRICAL SKILLS TO THE NEXT LEVEL!

We're proud to introduce the 'Electrical Fundamentals I' and 'Digital Multimeter Operation' classes to our Nexteligence training schedule. These one-day sessions are structured similarly to our current MAT classes and count towards Connected-Tech Certification. Please see factory schedule for dates and times.

On the first day, participants will explore basic electrical concepts and theories. The second day is dedicated to mastering the setup and use of a digital multimeter. Students will learn how to test various types of circuits to become thoroughly acquainted with the capabilities of a digital multimeter for testing and troubleshooting electrical faults.







Electrical Fundamentals I

- Review Safety Best Practices
- Overview Concepts & Circuits
- Read Schematics
- Recognize & Troubleshoot Faults





Digital Multimeter Operation

- Overview Functions
- Setup for Diagnosis and Testing
- Test Circuits













Basic Electrical and Digital Multimeter (DMM) Class Agenda

Day 1 - Electrical Fundamentals I - Automotive Format for the Refuse Industry

- 1. **Safety.** Adhering to safety rules and guidelines is always a top priority for everything we do. Review best practices, personal protective equipment (PPE), hazard definitions, and lock-out tag-out procedures.
- 2. What is Electricity? Learn how electricity is formed and the differences between alternating current (AC) and direct current (DC).
- **3. Types of Electrical Circuits.** Learn the types of electrical circuits and how voltage, amperage, and resistance affect each circuit.
- **4. Electrical Theory.** Overview and apply OHM's Law and the Power Formula, which are important equations for testing electrical components and knowing whether a device has failed without guesswork.
- 5. How to Read Electrical Schematics. Learn schematic symbols and how to read an electrical schematic.
- **6.** Faults in an Electrical Circuit. Learn different types of faults that can occur in an electrical circuit and how to test and repair each fault.
- 7. Knowledge Check. Test your knowledge by troubleshooting various fault scenarios in a circuit.

Day 2 - Digital Multimeter Operation (You must bring a multimeter for this portion of the class)

- 1. What is a Digital Multimeter (DMM)? Learn the components of the DMM and how each function is used to diagnose problems in an electrical circuit.
- 2. Rules for testing circuitry. Overview of the rules for testing and the types of tests.
- 3. **Testing Circuits.** Learn to test for voltage, voltage drop, resistance, and amperage.
- **4. Component Testing.** Apply your DMM to test various components such as relays, diodes, and coils.
- **5. Knowledge Check.** Test your knowledge by identifying how voltage, amperage, and resistance react in an electrical circuit at different points under various electrical conditions.













2025 LIVE ONLINE WEBINAR MAT TRAINING SCHEDULE

Online Training Dates	Product	Time
January 7 th , 8 th , & 9 th	Half/Pack w/Odyssey Controls	2pm - 4:30pm CST
February 11 th , 12 th , & 13 th	DuraPack Python	9am - 11:30am CST
March 11 th & 12 th	DuraPack 5000	9am - 11:30am CST
April 8 th & 9 th	Rapid Rail	2pm - 4:30pm CST
July 22 nd , 23 rd , & 24 th	Half/Pack Commercial	9am - 11:30am CST
August 5 th & 6 th	PowerTrak Commercial & PowerTrak Commercial PLUS	9am - 11:30am CST
August 19 th & 20 th	DuraPack 5000	2pm - 4:30pm CST
September 9 th , 10 th , & 11 th	DuraPack Python	2pm - 4:30pm CST
October 7 th , 8 th , & 9 th	Half/Pack w/Odyssey Controls	9am - 11:30am CST
November 4 th & 5 th	Rapid Rail	9am - 11:30am CST
December 2 nd , 3 rd , & 4 th	Half/Pack Commercial	9am - 11:30am CST

Note:

- Multiple day class duration = 2 to 2 ½ hours each day.
- One day class duration = 7 hour +/- single class
- Classes will start promptly at the listed start time each day.

Location:

Online

Enrollment Info:

For enrollment, contact your local Heil RCV dealer.

If you don't know who your local dealer is, visit www.heil.com/dealers

If you have any issues with enrollment, please contact the training department at $\underline{\mathsf{nexteligence}}\underline{\mathsf{doveresg.com}}$













LIVE ONLINE WEBINAR CLASSROOM LESSON OUTLINE

- 1. Safety. General Safety is always a must from everyday activities to well beyond using and working on equipment. Safety must always come first and be used and maintained at all times in everything we do.
- 2. Major Components. Location and system involvement of major components in the system.
- 3. **Electrical Symbols.** Learn electrical symbols to help understand circuits, certain ways electrical devices are wired and how they work are key elements for troubleshooting and understanding electrical schematics.
- 4. How to Read Electrical Schematics. Schematics are like road maps for electrical wiring showing detailed electrical routings and independent wire mapping. Learning how to read schematics will help you understand electrical circuits and where to find certain electrical connections. Reading Electrical Schematics is essential for troubleshooting Electrical applications.
- **5. Hydraulic Symbols.** Hydraulic Symbols relating to components in the hydraulic system and hydraulic schematics.
- 6. Hydraulic Schematics. Hydraulic Schematics, like Electrical Schematics, are road maps for the Hydraulic Systems showing detailed hydraulic routings and independent mapping. Learning how to read schematics will help you understand hydraulic circuits and where to find certain hydraulic components and connections. Reading Hydraulic Schematics is essential for troubleshooting the hydraulic system.
- 7. **Controls.** Learn about Spool Valves and how they are used to direct fluid flow in Heil® hydraulic systems and other controls for operations.
- **8. Remote Controller with Display.** Learn how to troubleshoot and navigate through the system using the Remote Controller with Display.
- **9. Maintenance.** General maintenance practices, torque specs, grease intervals, etc.
- **10. Troubleshooting.** Learn how to use the Display and Service Manual to troubleshoot.
- **11. Virtual "Hands On" Training.** 1 to 2 hours truck side, covering major components, how they are used, their location, and troubleshooting tips.













2025 FACTORY MAT TRAINING SCHEDULE

Factory Training Dates*	Product	Time
January 14th & 15th	DuraPack Python	8am – 4pm CST
February 25th & 26th	Half/Pack w/Odyssey Controls	8am – 4pm CST
March 18th & 19th	Electrical Fundamentals - Digital Multimeter	8am – 4pm CST
March 25th & 26th	RevAMP	8am – 4pm CST
April 22nd &23rd	Half/Pack Commercial	8am – 4pm CST
May 20th & 21st	DuraPack Python	8am – 4pm CST
June 3rd & 4th	Electrical Fundamentals - Digital Multimeter	8am – 4pm CST
June 10th & 11th	HalfPack w/Odyssey Controls	8am – 4pm CST
June 24th & 25th	RevAMP	8am – 4pm CST
July 8th & 9th	Half/Pack Commercial	8am – 4pm CST
September 16th & 17th	RevAMP	8am – 4pm CST
September 23rd & 24th	DuraPack Python	8am – 4pm CST
September 30th & October 1st	Electrical Fundamentals - Digital Multimeter	8am – 4pm CST
October 21st & 22nd	Half/Pack w/Odyssey Controls	8am – 4pm CST
November 18th & 19th	Electrical Fundamentals - Digital Multimeter	8am – 4pm CST
December 9th & 10th	RevAMP	8am – 4pm CST
December 16th & 17th	Half/Pack Commercial	8am – 4pm CST

^{*} Subject to change

** 3rd Eye training can be scheduled as a REQUESTED third half day upon request.

Note:

- Maximum number of students = 15
- Minimum number of students = 8
- If the minimum number is not confirmed 3 weeks prior to start of the class, then the class will be canceled.
- Class will start promptly at 8am CST each day.
- Students will be given a Service Manual for the product and a Student MAT Manual.
- This is a tobacco-free facility.

Students who participate in the Factory plant tour must wear long pants and steel-toed shoes to walk through the Heil manufacturing facility.

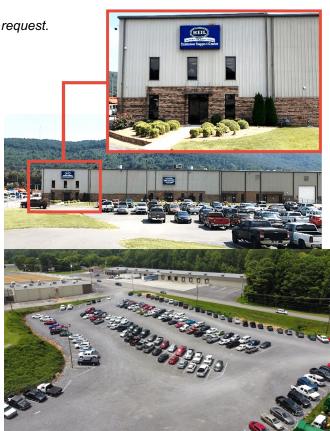
Location:

Heil Customer Support Center

4301 Gault Ave N

Fort Payne, AL 35967

- Across from the Alabama National Guard on Gault Ave.
 (Not the main plant entrance on 45th Street.)
- Parking is available in the upper/lower lots as well as the overflow lot near Parts Central as pictured here ->















FACTORY TRAINING CLASSROOM LESSON OUTLINE

Day 1 - Electrical

- 1. Safety. General Safety is always a must from everyday activities to well beyond using and working on equipment. Safety must always come first, and be used and maintained at all times in everything we do.
- 2. Electrical Symbols. Learn electrical symbols to help understand circuits, certain ways electrical devices are wired and how they work are key elements for troubleshooting and understanding electrical schematics.
- 3. Understanding OHM's Law and the Power Formula. Learn OHM's Law and the Power Formula will give you the ability to know the correct formulas for testing electrical components and knowing whether a device has failed without guesswork.
- 4. How to Use Multimeters. Multimeters are a great tool to add to your toolbox and learning how to use Multimeters to troubleshoot electrical circuits will advance your ability to test electrical parts, test wiring for faults, and find electrical problems with speed and accuracy.
- 5. How to Read Electrical Schematics. Schematics are like road maps for electrical wiring showing detailed electrical routings and independent wire mapping. Learning how to read schematics will help you understand electrical circuits and where to find certain electrical connections. Reading Electrical Schematics is essential for troubleshooting Electrical applications.
- **6. Remote Controller with Display.** Learn how to troubleshoot and navigate through the system using the Remote Controller with Display.
- 7. **Electrical Test.** Testing helps us see the value of what we have learned and the reinforcement of the ability to apply it practically.

Day 2 - Hydraulic

- 1. **Safety.** General Safety is your responsibility. Appling safe practices, in everything we do will help keep you and others healthy and alert to our surroundings.
- 2. Pascal's Law. Learn about Pressure, Flow, Power, Viscosity and Pressure Drop in great detail as it applies to a Hydraulic System.
- **3. Power Supplies.** Learn the differences between Gear Pumps, Vane Pumps, and Piston Pumps, as well as the effectiveness and efficiencies of each.













FACTORY TRAINING CLASSROOM LESSON OUTLINE

Day 2 - Hydraulic (continued)

- **4. Controls.** Learn about Spool Valves and how they are used to direct fluid flow in Heil® hydraulic systems.
- **5. Actuators.** Learn about different types of Hydraulic Cylinders, Motors, and Rotary Actuators, what they do and how to calculate their abilities.
- **6. Transmission.** Learn details about the transmission of fluid from point to point using Tubes, Hoses, and Fittings.
- **7. Storage and Conditioning.** Details of Reservoirs, Filters, Strainers, Coolers/Heaters and the effects on the hydraulic system.
- **8. Symbols.** Hydraulic Symbols relating to components in the hydraulic system and hydraulic schematics.
- 9. Schematics. Hydraulic Schematics, like Electrical Schematics, are road maps for the Hydraulic Systems showing detailed hydraulic routings and independent mapping. Learning how to read schematics will help you understand hydraulic circuits and where to find certain hydraulic components and connections. Reading Hydraulic Schematics is essential for troubleshooting the hydraulic system.
- **10. Troubleshooting Techniques.** Learn helpful hands-on troubleshooting.
- **11. Importance of Clean Hydraulic Systems.** Viscosity, contamination, controlling contamination, filter grading through micron and beta ratio formula.
- **12. Hydraulic Test.** Testing helps us see the value of what we have learned and the reinforcement of the ability to apply it practically.
- **13. Equipment Safety.** Safety is our number one goal at Heil and we hope it is at your company as well. Learn the Operator and Service Manuals with safety descriptions regarding Notices, Cautions, Warnings, and Dangers. Unit decal importance and care.
- **14. Maintenance**. Learn Specific Product Maintenance Practices, Preventative Maintenance, Pressure Adjustments, and Sensor Adjustments with the Product Service Manual review.
- **15. Hands-On Review and Operations.** Physically review and operations education on specific product when available.
- **16. Heil Plant Tour UPON REQUEST.** See how Heil turns flat steel into the world's leading, most innovative refuse collection vehicles ever made.
- 17. 3rd Eye class can be added to a 3rd half day upon request.



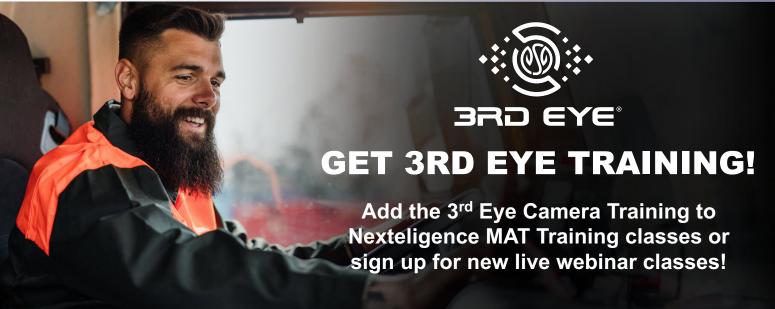












HELP YOUR TECHNICIANS TAKE THEIR 3RD EYE DIAGNOSTIC, REPAIR, AND MAINTENANCE ABILITIES TO THE NEXT LEVEL!

Nexteligence Factory Training classes help to dramatically increase the technical expertise of your technicians.

Reduce repair times for the fleets you service; increase productivity of your 3rd Eye products (or that of your customers); and provide invaluable troubleshooting knowledge that technicians can then use to train other technicians.

COMBINE CAMERA & DIGITAL TRAINING: 5 HRS

- 7" monitor overview/operation
- 9" Recording monitor overview/operation
- Heil interfacing Switchbox overview/operation
- Digital System Overview/Operation
- Positive Service Verification Overview
- Safety Systems
- Recycling Contamination Detection
- Microsite Training













2025 3rd Eye Nexteligence Connected-Tech Training











CLASSROOM LESSON OUTLINE

- 1. Safety. General Safety is always a must from everyday activities to well beyond using and working on equipment. Safety must always come first, and be used and maintained at all times in everything we do.
- 2. What is the 3rd Eye System. Understanding the system and the functionality is key to using and maintaining the camera components, and their connections.
- **3. Digital Components.** Identify the components and how they function with each other in the system.
- **4. Connections.** We will map out the connections, discuss the camera triggers, and discuss how to diagnose and repair a faulty connection.
- **5. Camera Functionality.** Identify the camera functionality within the system and the benefit of what each camera is used for.
- **6. J1939 Connections.** Learn how the camera system is a part of the J1939 Network and how to properly diagnose and make repairs to the connection should a problem arise.
- 7. **Event Triggers.** We will identify events that need to be captured and what component of the vehicle triggers the capture of the event.
- **8. Window Unit Details and Diagnostics.** Learn how the Window Unit functions, as well as how to use it as a diagnostic tool for troubleshooting the system.
- 9. Cellular and Data Transfer. Identify the cellular connections and how it is used to transmit data from the vehicle to the portal.
- **10. Efficient Troubleshooting Methods**. We will show attendees how to use efficient and effective methods of troubleshooting the system by using both technical methods and utilizing the portal if available.
- **11. Portal Training.** For users that have access to the Microsite, we will show live events, track camera status, and how to use this tool for valuable troubleshooting diagnostics and repair.













2025 3RD EYE LIVE WEBINAR TRAINING SCHEDULE

Online Training Dates	Product	Delivery Method	Time
January 14th	Camera & Digital	Webinar	8am - 1pm CST
February 25th	Camera & Digital	Webinar	12pm - 5pm CST
March 25th	Camera & Digital	Webinar	8am - 1pm CST
April 22nd	Camera & Digital	Webinar	12pm - 5pm CST
May 20th	Camera & Digital	Webinar	8am - 1pm CST
June 10th	Camera & Digital	Webinar	12pm - 5pm CST
July 8th	Camera & Digital	Webinar	8am - 1pm CST
August 5th	Camera & Digital	Webinar	12pm - 5pm CST
September 23rd	Camera & Digital	Webinar	8am - 1pm CST
October 21st	Camera & Digital	Webinar	12pm - 5pm CST
November 18th	Camera & Digital	Webinar	8am - 1pm CST
December 9th	Camera & Digital	Webinar	12pm - 5pm CST







Enrollment Info:

For enrollment, contact the training department at nexteligence@doveresg.com



2025 3rd Eye Nexteligence Connected-Tech Training











2025 3RD EYE FACTORY TRAINING SCHEDULE

- Conducted at Heil Training Facility as an extension to a REQUESTED half third day of the Heil Factory MAT training
- Only available as an add-on purchase option to the Heil MAT training

Training Dates	Product	Delivery Method	Time
January 16th	Camera & Digital	Factory	8am - 12pm CST
February 27th	Camera & Digital	Factory	8am - 12pm CST
March 27th	Camera & Digital	Factory	8am - 12pm CST
April 24th	Camera & Digital	Factory	8am - 12pm CST
May 22nd	Camera & Digital	Factory	8am - 12pm CST
June 12th	Camera & Digital	Factory	8am - 12pm CST
July 10th	Camera & Digital	Factory	8am - 12pm CST
September 25th	Camera & Digital	Factory	8am - 12pm CST
October 23rd	Camera & Digital	Factory	8am - 12pm CST
November 20th	Camera & Digital	Factory	8am - 12pm CST
December 11th	Camera & Digital	Factory	9am - 12pm CST
December 18th	Camera & Digital	Factory	9am - 12pm CST





Enrollment Info:

For enrollment, contact the training department at nexteligence@doveresg.com



2025 3rd Eye Nexteligence Connected-Tech Training











Holiday Inn Express & Suites - Fort Payne, AL

Special Pricing for HEIL Training Students!

Contact Information:

112 Airport Road West Fort Payne, Alabama 35968 United States

Director of Sales:

Darlene Temple / +1-256-997-1020

GDS CODES:

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This Quality of Excellence Award winner offers the perfect location for corporate and leisure travelers. To Go Breakfast, stay connected with IHG Connect, seasonal outdoor pool, newly installed bathrooms, 24-hr exercise facility, sundry shop, business center area, meeting room with AV equipment and the convenience of onsite laundry.

Fort Payne offers views with its location between Lookout Mountain and Sand Mountain. Enjoy a variety of outdoor activities such as Rock climbing, Repelling, Kayaking, Zip lining and trails through Little River Canyon and Desoto State Park. Enjoy a stroll through the Historic Downtown with many shops and eateries, like The Spot. Fort Payne is a stop along the World's Longest Yard Sale (in August) and Antique Alley (in May) that attracts thousands of travelers to the area.

Don't forget to stop by the Alabama Band Fan Club and Museum to view the many awards and collections from the Country Music Group of the Century. Our comfortable accommodations provide the amenities and services travelers expect!

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- On-Site Business Center
- Outdoor Pool
- On-Site Fitness Center
- Complimentary Breakfast Buffet
- Off-Site Restaurant Delivery Available
- Walking Distance To Off-Site Restaurants
- Newly Renovated

IHG Rewards Member?

Be sure to let us know if you are an IHG Rewards Member. If not, let us sign you up and you will receive additional bonus points just for being part of the Heil® Training Group! Ask for the Heil/Dover discount!

















Hampton Inn - Fort Payne, AL

<u>Contact Information:</u>
1201 Jordan Road Southwest
Fort Payne, Alabama 35968
United States

TEL: +1-256-304-2600



We're just off I-59, half a mile from the DeKalb Regional Medical Center and Siemens Energy. Head a mile east on Glenn Boulevard into Fort Payne, where you can find local attractions and eateries like the Alabama Fan Club and Museum and the Vintage 1889 Cafe. Enjoy free daily hot breakfast and free WiFi.

















Free breakfas

WiF

Non-smoking

Free parking

Indoor pool

Fitness center

Business center



























TAKE ADVANTAGE OF OUR TRAINING RESOURCES!



Service Shack tutorial videos are available to you 24/7. Our Service Gurus cover a wide range of topics, with easy-to-understand tutorials that can save hours of valuable time and keep your Heil and 3rd Eye products in peak operating condition.

Visit the Heil Service Shack

Visit the 3rd Eye Service Shack

https://www.heil.com/service-shack

https://www.3rdeyecam.com/service-shack



Monthly Nexteligence Newsletter

The **Nexteligence Newsletter** is a monthly resource that focuses on a wide range of specialized topics, such as hydraulics, electrical systems, camera systems, and more. Visit the links below to sign up:

Heil - https://www.heil.com/newsletter-signup/

3rd Eye - https://www.3rdeyecam.com/nexteligence-newsletter-signup/



