



TRAINING SCHEDULE

SPRING 2009

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TECHNICAL TRAINING AT A CONVENIENT LOCATION

In response to repeated customer requests, your local Trane office is bringing technical training to the area in April and May 2009.

Get the technical training you need without traveling to a Trane factory to get it. Instructors include experts from the Trane College of Building Automation in St. Paul, MN and the Trane Technical Service Center in La Crosse, WI.

Get all your questions answered about Precedent, Voyager and Intellipak machines and learn to Troubleshoot VariTrac Tracker.



Trane Office – Latham, NY

QUESTIONS?
518-785-1315

VARI TRAC®/TRACKER® TROUBLESHOOTING

Instructor: Herb Kuehl

Date: Thursday, April 9

Time: 8:00 am to 4:30 pm

Fee: \$295

(Registration deadline: Tuesday, March 31)

Join Herb Kuehl from Trane's College of Building Automation in St. Paul, MN for basic installation and startup of Trane ICS. Particular attention is given to the Comm5 communication bus.

Prerequisite: Experience with previous versions of Tracker and VariTrac is very helpful. This course is intended for installing and startup technicians.

Outline:

- ICS system architecture
- Tracker v10, models 12 & 24
- ZN517 unitary control



Herb Kuehl with a student

SPECIAL POINTS OF INTEREST:

- Easy access off I-87
- Plenty of free parking
- Lunch will be provided
- Literature and hand-outs to take with you for future reference
- Space is Limited!
Register Today!

- MP503 input/output module
 - Configuration, installation & setup
 - Binary output programming
- Voyager and ReliaTel units used with delivered ICS
 - Understanding the Comm5 communication card
 - Comm5 replacement & upgrade
- Delivered zoning
- VariTrac changeover bypass
 - Central control panel
 - VariTrac dampers & sensors
- Delivered variable air volume
 - Daytime and morning warm up
 - Supply air temperature reset
 - Fan pressure optimization
- Tracker software demonstration

INTELLIPAK™ ROOFTOP SERVICE AND CONTROLS

Instructor: Chris Walmsley

Dates: Tuesday & Wednesday, May 5 & 6

Time: 8:00 am to 4:30 pm

Fee: \$505

Registration deadline: Friday, April 24

Chris is a training engineer at the Trane Technical Service Training Center in La Crosse, WI

Topics Addressed:

This seminar covers operation, diagnosis and troubleshooting for Trane IntelliPak Rooftop microcontrol systems with additional detailed coverage of cooling, heating, economizer and airside systems for IntelliPak series rooftops.

Specific Course Objectives:

- Familiarize on IntelliPak System mechanical, heating and airside components, their operation setup and service.
- Learn configuration and operation of IntelliPak electronic controls.

- Know the diagnostic, checkout, testing and troubleshooting procedures for these controls.

Outline

Mechanical Systems/Refrigeration Cycle

- Model R & Scroll Compressors
 - Construction
 - Operation/Checkout
 - Failure Modes
- Condenser - Performance Mapping



- TXV
- Evaporator

Mechanical Systems/Heating Cycle

- Modulating Gas Heat



- Components
- Combustion Cycle
- Operation
- Electric Heat - Operation
- Hydronic Heat - Components & Operation

Mechanical Systems/Airside

- Supply Fan Setup
 - Proper static, CFM, and HP
 - Variable Frequency Drive Setup
- Verifying Proper Airflow Using Instruments, Charts, Curves, Formulae

IntelliPak Control Package

- Modules: Menus; Inputs and Outputs
- Configuration/Setup
- Service - Testing Outputs, Checking Operation
- Diagnostics and Troubleshooting
 - Checking Status
 - Diagnosing Failures

PRECEDENT™ AND VOYAGER™ ROOFTOP OPERATION, SERVICE AND CONTROL

Instructor: Chris Walmsley

Date: Thursday & Friday, May 7 & 8

Time: 8:00 am to 4:30 pm

Fee: \$505

Registration deadline: Friday, April 24

Chris is a training engineer at the Trane Technical Service Training Center in La Crosse, WI

Topics Addressed:

This seminar will emphasize installation, component overview and operation, diagnosis and troubleshooting for the Precedent and Voyager ReliaTel control system. Includes coverage for economizer and heating systems.

Specific Course Objectives:

- Familiarize on usage of ReliaTel micro-electronic hardware
- Learn application and operation of rooftop electronic controls
- Know the diagnostic, checkout, testing

and troubleshooting procedures for these controls

- Become familiar with combustion cycle and operation and troubleshooting of heating components
- Learn system maintenance requirements
- Review Trane wiring diagram conventions



Outline

Application and Options

- Applications
- Systems and Control Components
- Refrigeration Cycle

System Operation

- Mechanical Cooling
 - Components
 - Options

- Operation
- Checkout

Economizer and Cooling

- Installation
- Operation
- Adjustment
- Maintenance

Heating

- Combustion Basics
- Components
- Operation
- Combustion Analysis
- LP Conversion

Heat Pump

- Components
- Operation
- Defrost Cycle

Maintenance

- Mechanical
- Cleaning
- Troubleshooting

Electrical Wiring

- ANSI-Style Diagrams
- Power Wiring
- Connection Diagrams
- Control Schematics





USE A SEPARATE FORM FOR EACH STUDENT

HOW TO PAY

- Trane accepts Visa, MasterCard, AmEx, check or purchase order (PO).
- If you are paying with a PO, we must have a copy of the PO or space will not be reserved for the student(s).
- All checks should be made payable to *Trane*.
- Classes must be paid in full in advance of the class date.
- All prices include cost of materials.

SUBMIT FORM TO:

Trane
301 Old Niskayuna Road
Suite 1
Latham, NY 12110
Fax: 518-785-4359

CANCELLATION POLICY

Trane reserves the right to cancel any class. Students will be notified of a cancelled class on or before the sixth business day prior to the class date. We will refund all monies paid by each student at that time. Any student withdrawing from a class within six business days of the course date is subject to pay full tuition cost.

QUESTIONS?

Call 518-785-1315
Toll Free 800-785-8980
Email: dmtraver@trane.com

REGISTRATION FORM

FAX OR MAIL COMPLETED FORM (FAX: 518-785-4359)

PLEASE REGISTER ME FOR THE FOLLOWING SEMINARS:	DATE	FEE	CLASS NO.
_____ Varitrac/Tracker Troubleshooting	April 9	\$295	TRTRK02
_____ IntelliPak Rooftop Service and Controls	May 5 & 6	\$505	TRINT01
_____ Precedent and Voyager Rooftop Operation, Service and Control	May 7 & 8	\$505	TRVOY01

PLEASE MAKE A COPY OF THIS FORM FOR YOUR RECORDS

Student Name

Student Phone

Contact Name (if different from student)

Contact Phone

Contact Fax

Company

Address

City

State

Zip Code

Email Address

Total Due

METHOD OF PAYMENT

Check # _____

Purchase Order # _____ (Enclose Copy)

Credit Card (circle one): Visa Mastercard American Express

Account Number: _____ Exp. Date _____

Cardholder Name (Please Print) _____

Cardholder Signature _____



TECHNICAL TRAINING SCHEDULE

Varitrac®/Tracker® Troubleshooting

Thursday, April 9 (Registration deadline Tuesday, March 31)

IntelliPak™ Rooftop Service & Controls

Tuesday, May 5 & Wednesday, May 6 (Registration deadline Friday, April 24)

Precedent™ and Voyager™ Rooftop Operation

Thursday, May 7 & Friday, May 8 (Registration deadline Friday, April 24)

DIRECTIONS: TRANE, 301 OLD NISKAYUNA ROAD, LATHAM, NY (518-785-1315)

From the South:

- I-87 North ("Northway") to Exit 5
- Right at light at end of ramp
- Go through two lights and bear right on Old Niskayuna Road
- After 1/10th of a mile turn right on access road. Look for the Nexus Park sign.
- Trane is the second building on the left

From the North:

- I-87 South ("Northway") to Exit 5
- Right at light at end of ramp
- Go through next light and bear right on Old Niskayuna Road
- After 1/10th of a mile turn right on access road. Look for the Nexus Sign.
- Trane is the second building on the left

Trane, a leading global provider of indoor comfort systems and comprehensive facility solutions, is a single-source provider of equipment, controls, service, parts, training, energy management systems, asset management services and performance contracting for commercial, industrial and institutional buildings. The New York-Vermont district has sales and service offices in Albany, Rochester, Syracuse, and Burlington, VT; and Trane HVAC Parts & Supplies stores in Albany, Corning, Rochester and Syracuse.

More than 60 HVAC Vendor Lines plus Light Commercial Unitary equipment



Visit one of our four Trane HVAC Parts & Supplies stores

Albany

51 Railroad Avenue
Albany, NY 12205
Phone: 518-453-6005
Fax: 518-453-1394
Toll Free: 888-698-7263
After Hours: 518-365-8394
www.trane.com/albany

Rochester

460 Buffalo Road, Suite 300A
Rochester, NY 14611
Phone: 585-256-1028
Fax: 585-256-0384
Toll Free: 866-227-7550
After Hours: 585-370-3750
www.trane.com/rochester

Corning/Elmira

19 Palmer Road N
Big Flats, NY 14814
Phone: 607-562-2510
Fax: 607-562-2501
After Hours: 607-857-2977
www.trane.com/rochester

Syracuse

15 Technology Place
East Syracuse, NY 13057
Phone: 315-432-9119
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Toll Free: 877-380-7569
After Hours: 315-374-0931
www.trane.com/syracuse