

Welcome to DPS Telecom Factory Training

When you purchase a DPS Telecom product, you NEVER have to go it alone — you always have the full support of DPS behind you. DPS Telecom Factory Training will show you the most effective ways to use your T/Mon system and DPS remotes. DPS Training will increase your efficiency at work, and when you go home you'll have a lot of knowledge to pass on to your colleagues.

You'll learn the hows and whys of successful network alarm monitoring — including valuable troubleshooting tips. You'll get lots of hands-on time with the equipment and have a chance to experiment with new features in a no-risk lab environment.

Have important technical questions? We invite you to speak any member of the DPS staff to handle all your questions and concerns. *Let your instructor know if you'd like to speak with a member of our Engineering, Tech Support, Sales, Production, or other DPS staff.*

Thanks for attending the DPS Factory Training Event, and enjoy the next four days!

Course Overview

- T/Mon Database Basics
- Monitor Mode Basics
- T/GFX Basics
- T/Mon Hardware Basics
- Remote Access
- DPS Remotes Overview
- NetGuardian Setup and Operation
- ASCII Overview
- SNMP Overview



T/Mon NOC



AlphaMax



NetGuardian 832A

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T/GFX



DPM

Day 1 - Monday

Distribute Agenda and Documentation

Introduction to Network Alarm Monitoring

Overview of Applications

Syllabus Review

Basic Alarm Theory

GFX Monitor Mode

- Alarm Summary
- COS and Live Windows
- Text Messages
- Trouble Logs
- Site Statistics / Analog Values
- Silence / Tag Alarms
- Protocol Analyzer
- Address/Port Stats
- History Reports

T/Mon Monitor Mode Basics

- Alarm Summary
- COS and Live Windows
- Text Messages
- Trouble Logs
- Site Statistics / Analog Values
- Silence / Tag Alarms
- Issuing Pager and E-mail Messages
- Dial-up Alarms
- Protocol Analyzer
- Address/Port Stats
- History Reports
- T/Mon DTMF/Voice Interface
- T/Mon SQL

Lunch (1 hour)

Product Overview

T/Mon Database Basics

- Network Setup
- T/Link Password
- Controller Card Setup
- Port Configuration
- LAN Remotes
- Web Browser and Remote Access
- Pager
- Multi-Master Setup



T/Mon NOC is a powerful master system used to monitor DPS remote units as well as other remote units.



The T/Mon NOC back panel can be expanded from 8 to 24 Port Interface Cartridges and contains a LAN port, a modem port, a COM port and dual -48 VDC power inputs.

Day 1 - Monday

T/Mon Database Basics Continued

- Using Derived Alarms and Controls
- Alarm Formatting
- Miscellaneous Parameters
- Window Assignments
- Text Messages
- Pager Support
- LAN-based NetGuardian
- Entry Control Unit (ECU)
- Alarm Descriptions
- Internal Alarms
- Security (System Users)
- SNMP out

Backup Procedure

Transfer Database from Multi-Master

Remote Access

- T/Remote for Windows (LAN)
- Web Browser

T/Mon Hardware Basics

- Network Setup
- Relay Cards
- PCI Cards and T/Mon NOC Port Interface Cartridges
- 600 Cards (IAM and T/MonXM WorkStation only)
- 602 Card and Docking Modules (IAM and T/MonXM WorkStation only)
- Port Assignments
- T/Mon Diagnostics
- Cabling Issues
- T/Mon NOC Slide Rack
- Floppy and CD Drives

Quiz

T/Mon Top 10 Enhancements

T/Mon Top 10 Critiques

Daily Take-Away Review Session



The Web Browser interface allows users to view and acknowledge alarms via the Internet.



T/Mon offers full pager support for Alphanumeric, Numeric, and DTMF pagers, plus email notifications.



T/Windows gives you complete control of your T/Mon system from a remote computer running Microsoft Windows.

Day 2 - Tuesday

DPS Company Intro

NetGuardian Introduction:

When you are finished you will be able to do the following:

- Install, maintain, and troubleshoot
- Know the hardware
- User interfaces monitoring and provisioning
- Test the unit

Front and Back of Unit

- Review Connectors and Indicators

Accessing the inside of the unit

- Safe unit and board handling
- How to Open the Unit
- Identify the Jumpers
- How to Close the Unit

Setting Up the Unit

- -48V power hookup (including safety)
- Discrete Alarm Connections (w/66 blocks)
- LAN Connection
- POTS Connection
- Serial Ports

Power up the Unit - Initial Configuration will be DCP

First Time or on Site Unit Setup (Set IP via Craft TTY Interface)

3 Ways to Provide Subsequent Provisioning and Monitoring

- TTY-Provision (Initial IP Provisioning) and Monitor
 - Craft
 - Telnet (Port 2002)
- Web Browser Monitor
- NGEEdit



In addition to customized protocol support and multiple interface options, the NetGuardian has 32 alarm inputs, 8 controls, and 8 analogs.



The NetGuardian back panel has eight DB9 DCE type serial ports, two 50-pin Amphenol™ alarm/control/analog connectors for alarms/controls/analog, one DB9 analog connector, one RJ45 jack for LAN, one RJ-11 jack for a telephone line, and a power barrier strip.

Day 2 - Tuesday

Test Discrete Alarm

- Demonstrated on LCD
- Demonstrated on Web Browser
- Shown on T/Mon

Lunch (1 hour)

DPS Factory Tour

KDA

- T/KDAW Interface
- Discrete Alarm Connection
- Basic Functionality

AlphaMax

- T/AlphaW Interface
- Discrete Alarm Connection
- Basic Functionality

Troubleshooting and Common FAQs

- Debug Visibility

Firmware Downloads

- Downloads from Master Stations
- On-site - DPS Load (if loading is necessary other than from a master)
- Centralized LAN-based NG Loader

Break up in groups of two for hands-on training

Quiz

Daily Take-Away Review Session



You can view alarms and configure the NetGuardian over LAN using any web browser.



Cases for DPS products are cut from sheet aluminum with a 50,000 PSI jet of water and garnet.

Day 3 - Wednesday

ASCII Overview

- Pattern Matching - ID the message type
- Pattern Extraction - Isolate info: site, alarm ID, state



The ASCII Processor provides functions for precisely defining ASCII extraction rules and actions.

What are rules?

- The basic rules “F” “K” “L”
- Literals & Keys

Difference between standard and autotabbing ASCII

T/Mon ASCII devices are collections of rules

- Rule 0 - Device header (Hard vs Soft separator)
- Non 0 - Normal Rules
- Rule Evaluation order - Do specifics first
- Several ways of doing the same thing (Using Not)
- Parsing always Left to right, from top to **bottom**

Designing a Key Map

- K1-K9 is always the “extraction key”
- K10-K14 is always the site key
- K15-K30 may be used for auto DB ASCII
- Blank entries ignored
- The importance of using literals



ASCII Key Map Definition determines how Key Slot contents will be arranged into keys.

Lunch (1 hour)

T/Mon Tables

- Using tables to change alarm severity to Yes / No events
- Using tables to generate the “clear case”

Using the example - Walk through the rule set

More autotabbing concepts -

- Key and address mapping

Bring in an ASCII alarm from the test set

- The @ symbol
- The only time you can ack standing

ASCII Analyzer

Advanced ASCII

- Variables / Loops / Relative vs Absolute / Templates
- Rule import & export / Tokens
- Sending commands (log on / off), connectivity

Hands-On ASCII Exercises/Breakout Sessions

Quiz

Daily Take-away Review Session



The ASCII Analyzer permits analysis of ASCII processing during actual receiving of messages on ASCII input ports.

Day 4 - Thursday

SNMP Overview

DPS MIB

- Alarm information objects
- Control objects
- TRAPS

SNMP on T/Mon

- SNMP Agent
- SNMP Trap Processor
 - MIB compiling
 - Rules-based mapping

Lunch (1 hour)

DPS Telecom Product Overview DPS Factory Tour

Building Access

T/GrafX

Open Sessions Q & A

Open Session Training

- Hands-on activities
- Client applications

Factory Training Conclusion



DPS provides remote telemetry units for any size site, with multiple protocols and interface options.



T/Mon sees all: "Since the T/Mon lets us know what's wrong, we can advise technicians on what parts they might need when they go on site."

DPS Telecom Factory Training Event Instructors

**Ron Stover**

As one of the founders of DPS Telecom, Ron combines core monitoring knowledge with practical tips gathered from years of providing technical support for DPS clients.

**Chris Hower**

Having virtually every DPS product pass through his hands, Chris brings a wealth of knowledge and background about the DPS product line to share with clients.

**Eric Storm**

As a founder and President of DPS, Eric has years of experience in client service providing network reliability management solutions.

**Carina Portillo**

As your factory training hostess, Carina assists your instructors in providing an enjoyable learning experience by coordinating meals from highly rated local restaurants.

Your instructors are here to help you. They're happy to answer all your questions and encourage you to participate fully in the class. If you want to spend more time on a topic, your instructor will be pleased to meet with you in a one-on-one breakout session.

*"Your Partners In Network Alarm Management"***www.dpstelecom.com**

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