# Overview of JMRI

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For Pr. William Model Railroad Club
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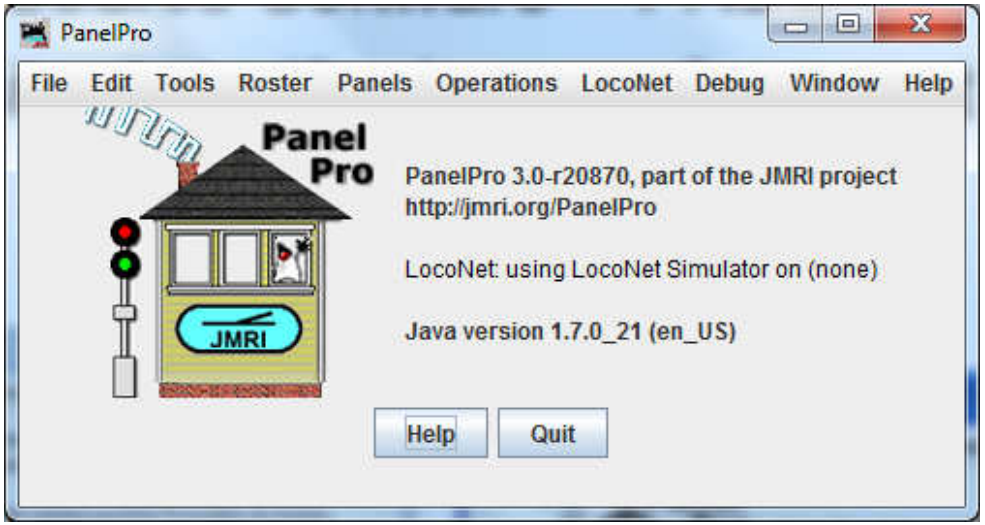
# Agenda

- Getting Started
- Introduction to JMRI Software
- Key Features
  - Decoder Pro
  - Decoder Pro 3
  - Panel Pro
  - Operations
  - Loco Net Tools

# Introduction to JMRI

- JMRI – Java Model Railroad Interface

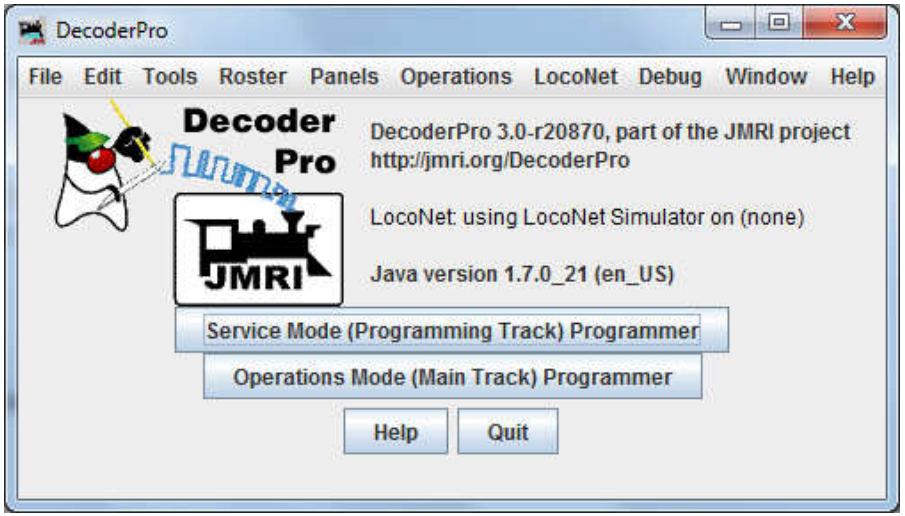



# System Requirements

- JMRI
  - Open Source Software = FREE!!
  - Web site: http://jmri.sourceforge.net
  - Features shown from version 2.4 and upwards
  - Ver. 2.4 requires
    - Windows XP or Newer
    - Java Runtime Environment (JRE) 1.6 or higher
      - JRE is free from http://www.java.com
  - LocoBuffer USB for Digitrax Systems
    - I sell

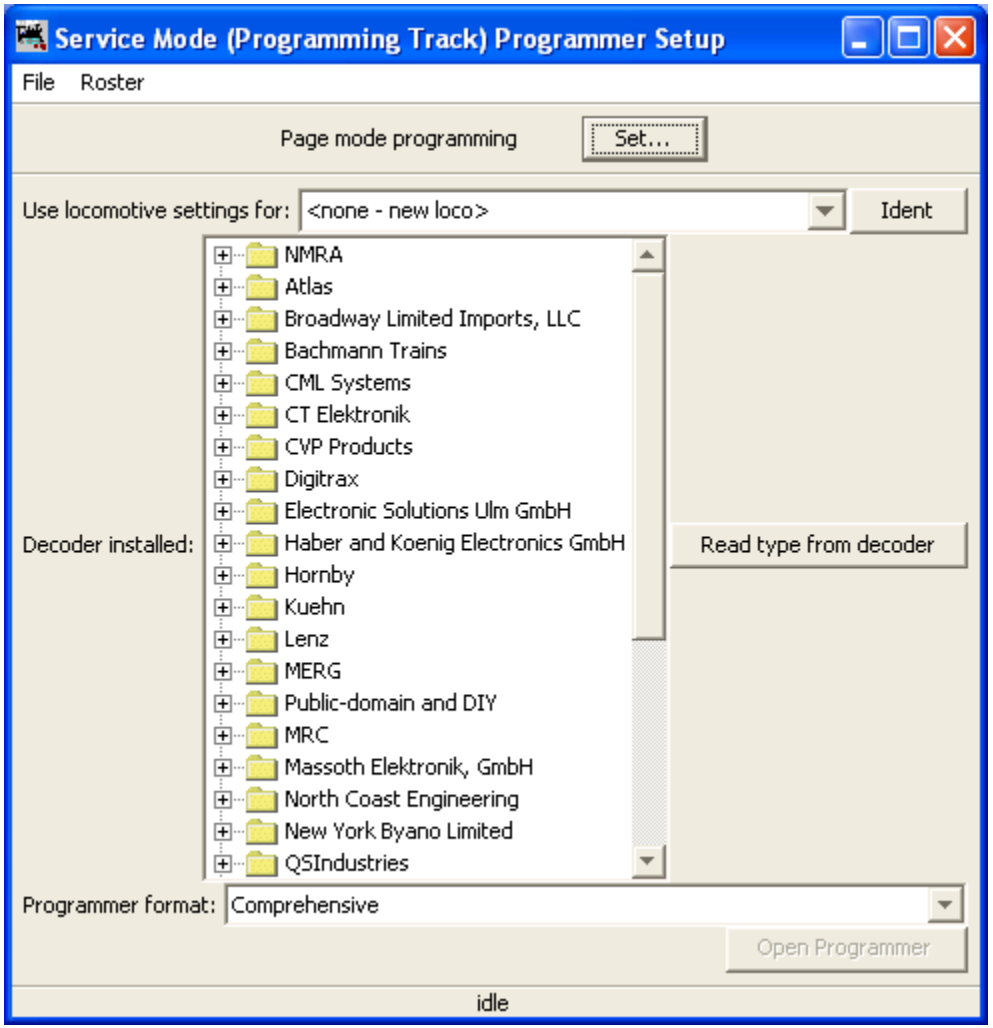
# Decoder Pro

- Used to Program Decoders
  - Mainly Locomotives
  - Some Stationary Decoders
    - Digitrax DS54 (old)
    - Team Digital Products
  - Configure all features
    - Address
    - Sound level
  - Factory Reset
  - Saves Settings for fleet



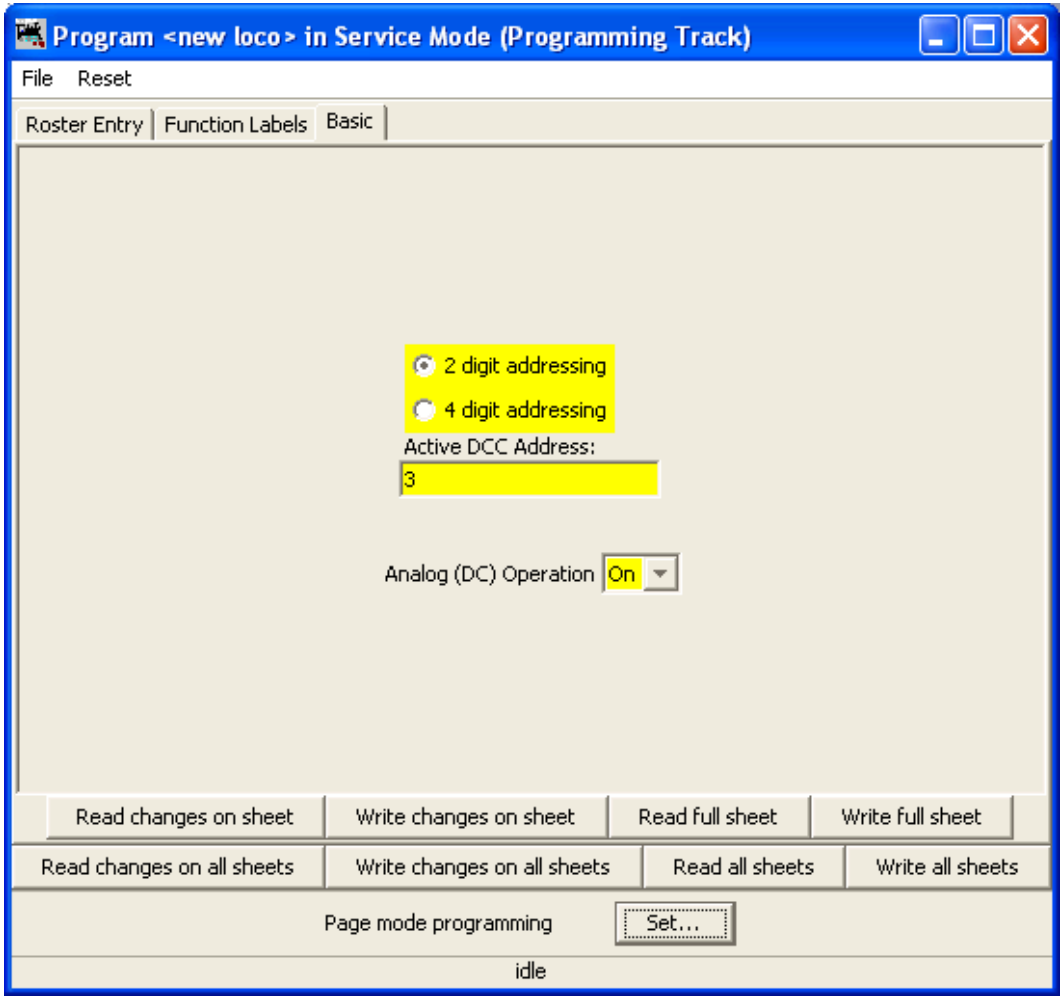
# Basic Programming

- New Locomotive
  - Read Type from Decoder
  - Browse to find Decoder
- Existing Locomotive
  - From Roster



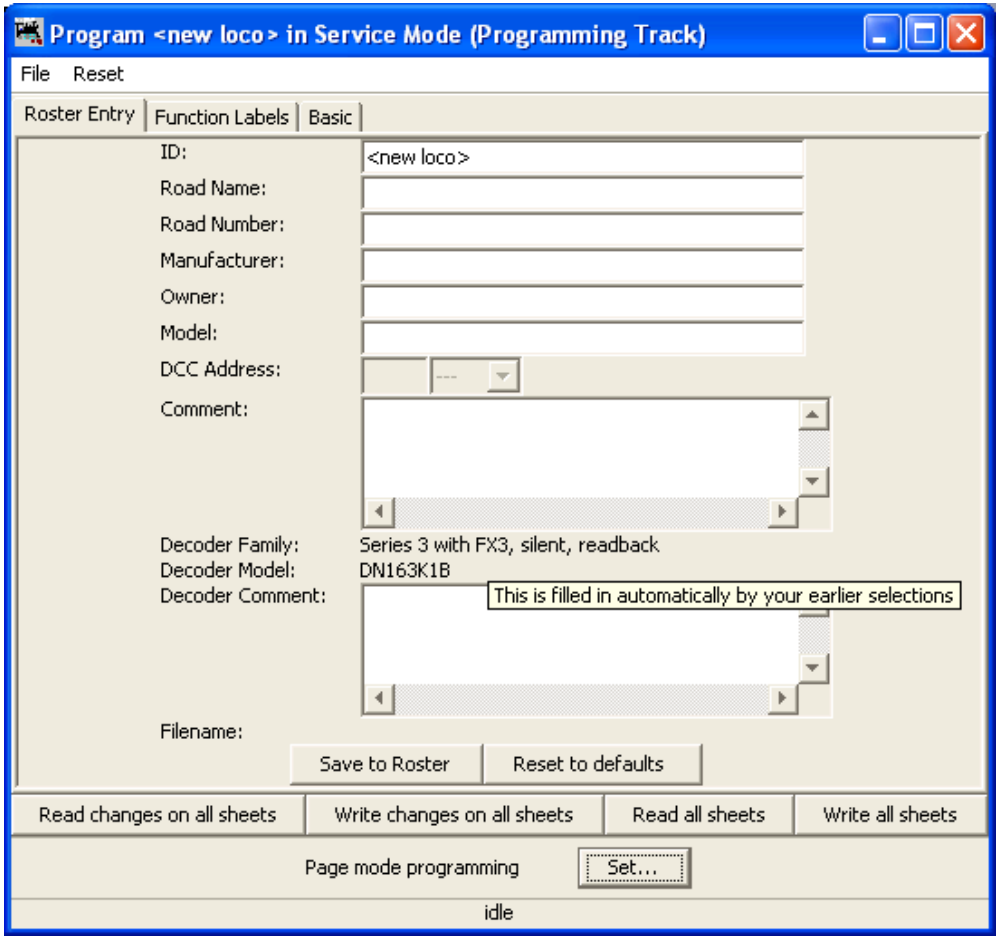
# Basic Programming

- Screen
- Basic Tab
  - Address
    - 2 Digit
    - 4 Digit
  - Analog Operation
- Button Basics
  - Read
  - Write



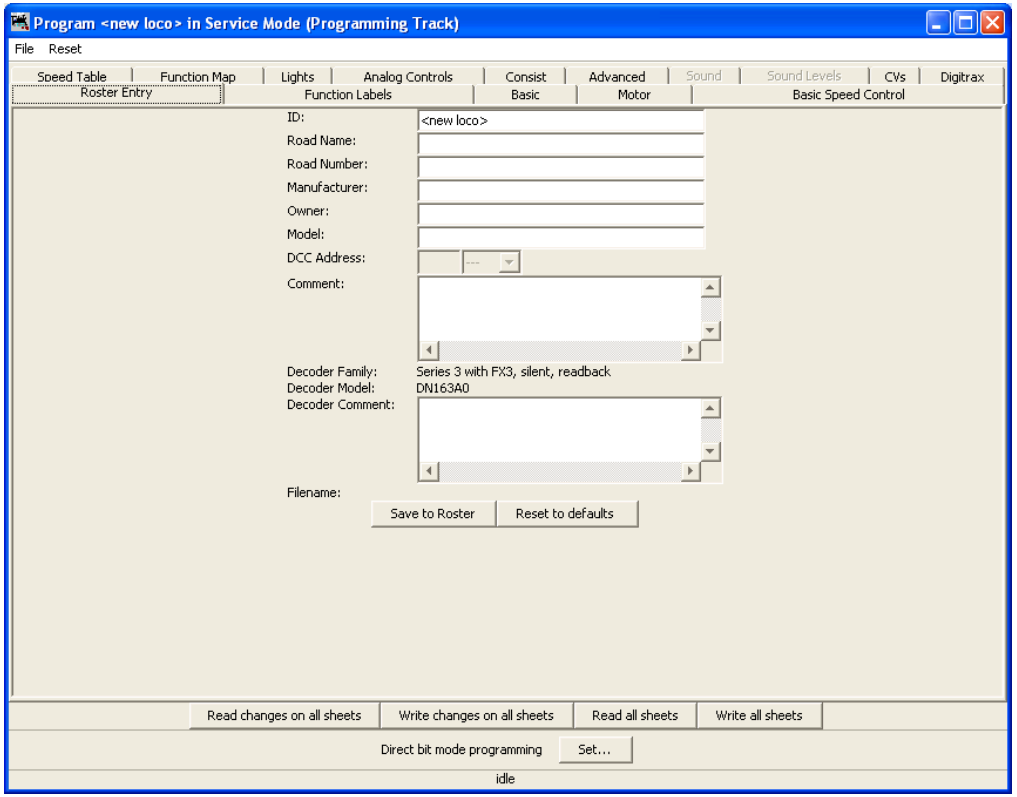
# Basic Mode Programming

- Roster Entry Tab
  - Locomotive Info
  - Decoder Info
  - Owner Info



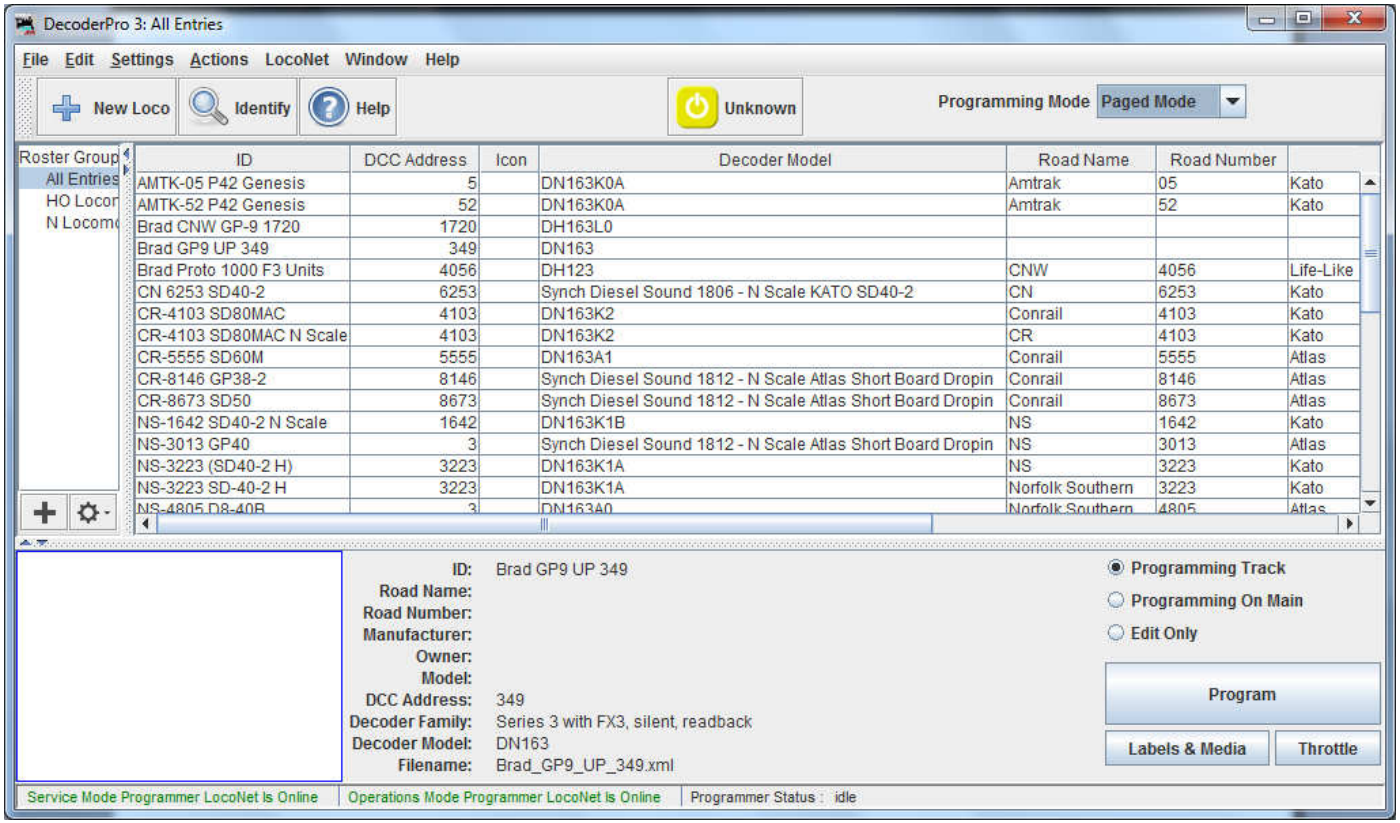
# Comprehensive Mode

- Full Feature Mode
- Basic, plus the following:
  - Basic Speed Control
  - Speed Table Tab
  - Function Map Tab
  - Lights Tab
  - Sound
  - Decoder Specific



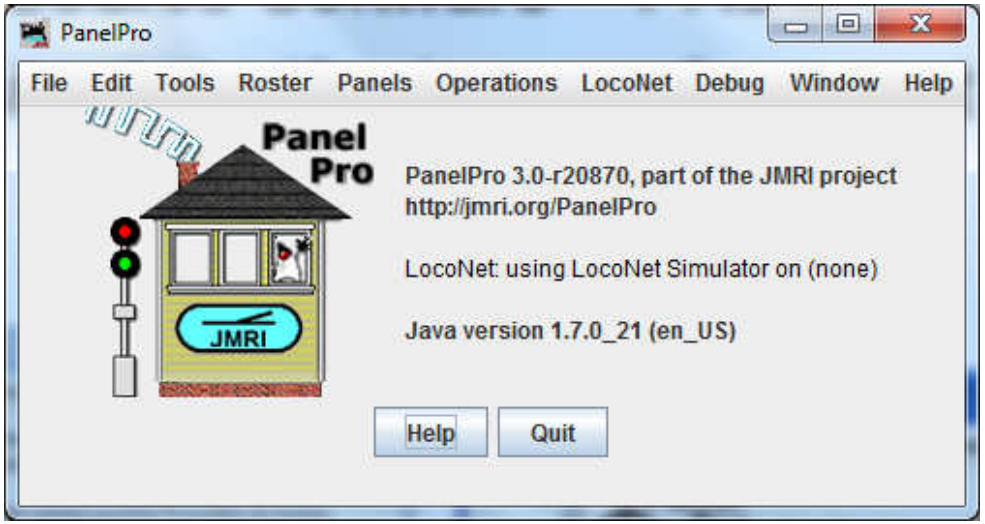
# Decoder Pro 3

- New Opening Interface
- Same Programming Panels



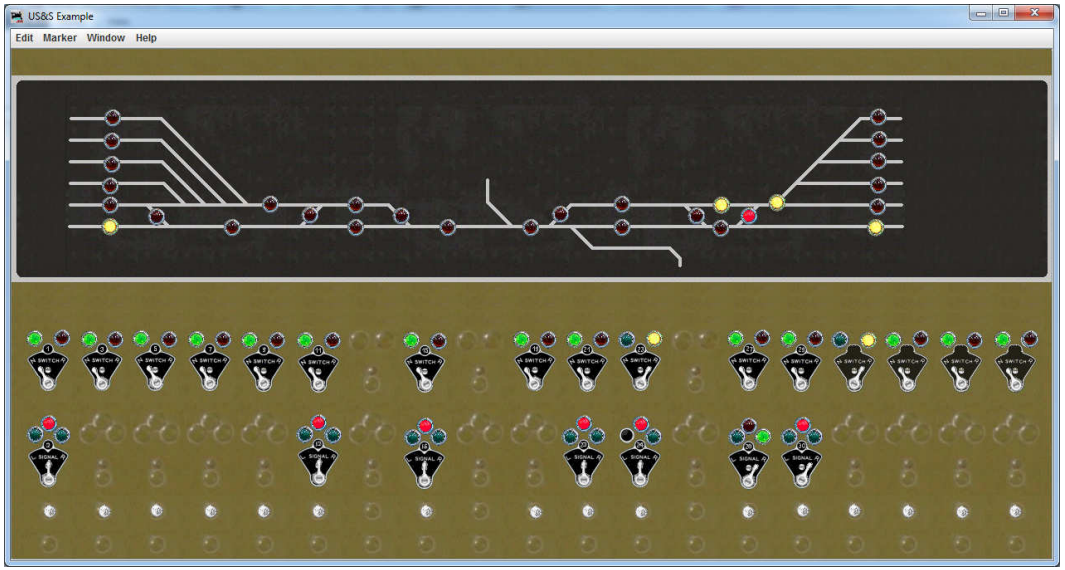
# Panel Pro

- Create Layout Control Panels on Computer
  - Dispatcher
  - Yardmaster
- Create Automation for Layout
  - Route Control
  - Signal Control
  - Interlocks



# Examples

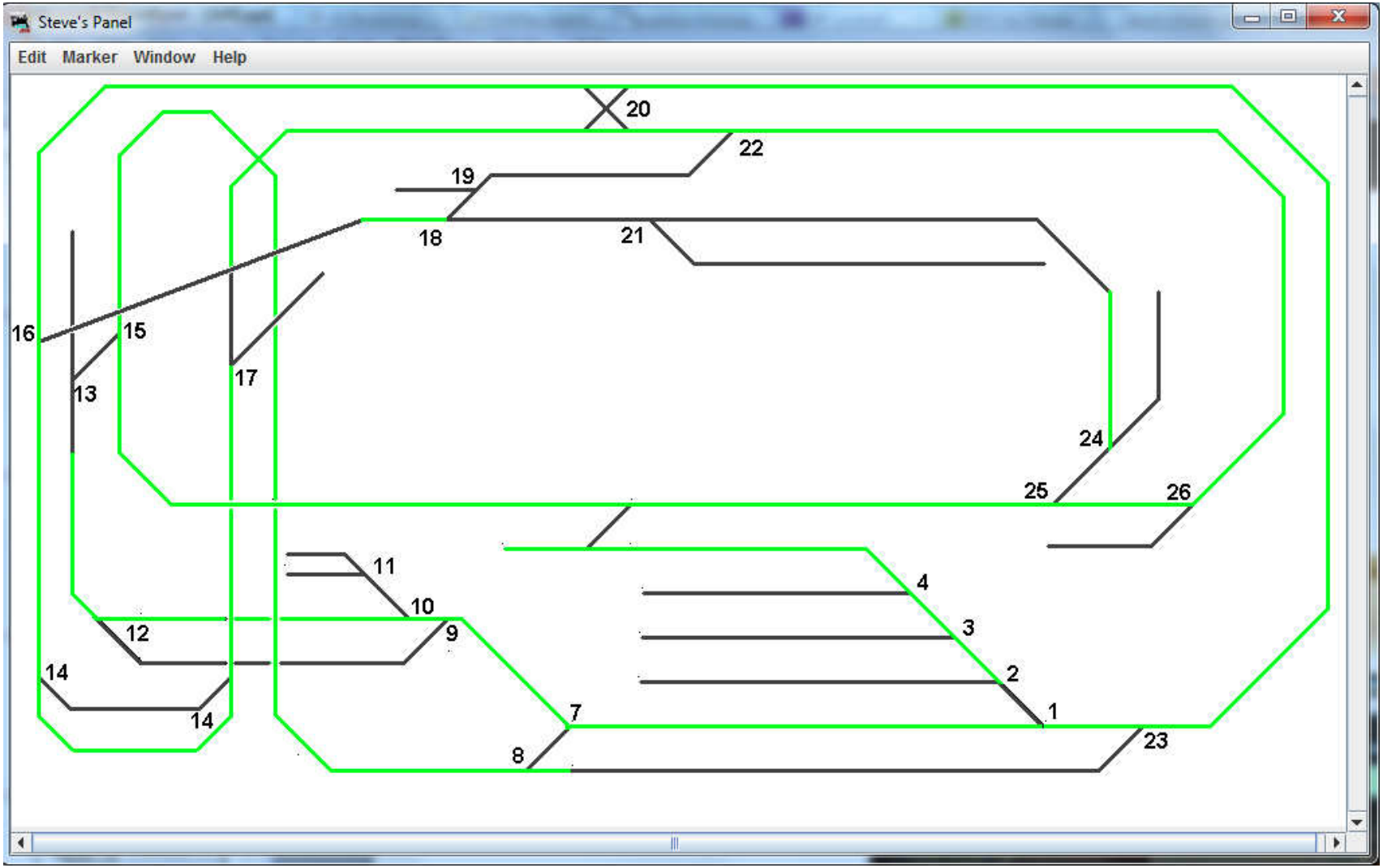
- Union Switch & Signal
  - Amber Lights are Occupancy
  - Red on Track Plan is Interlocks
  - First row of switches is for Turnouts
  - Second row of switches is for Signals



# Examples

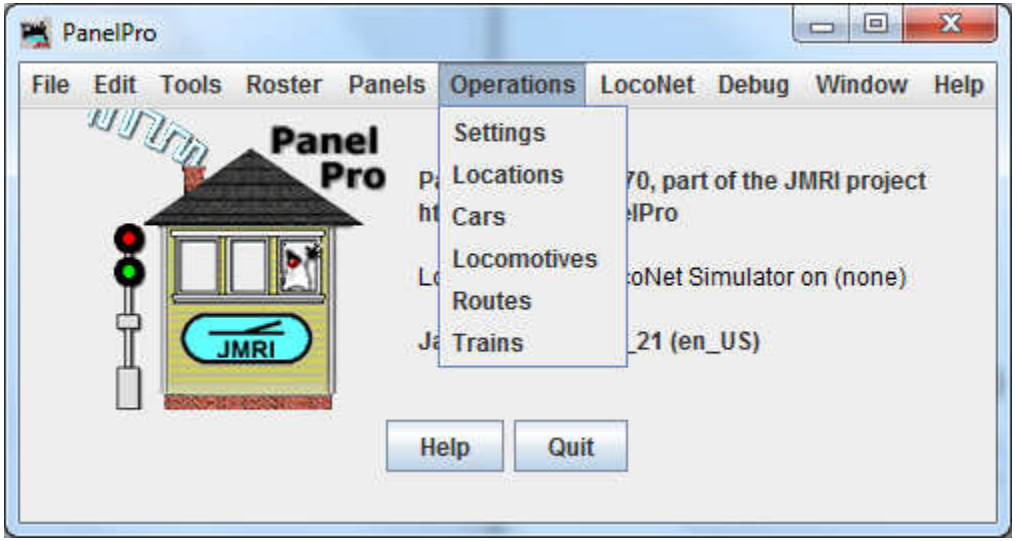
- PD&Q Dispatcher
  - Simpler Format
  - Turnouts Control
  - Occupancy Display
  - Signal Automation (Future)

# Layout Example



# Operations

- Embedded in PanelPro
  - Almost another program
  - Generates lists for Train Crews and Yardmaster
- Major Steps
  - Identify Locations & Tracks
    - Staging, Spurs, Yards, etc.
  - Enter Locomotives & Cars
    - YardBoss Software can be Used
  - Generate Routes to be Use
  - Generate Trains and Schedule
  - Print Lists

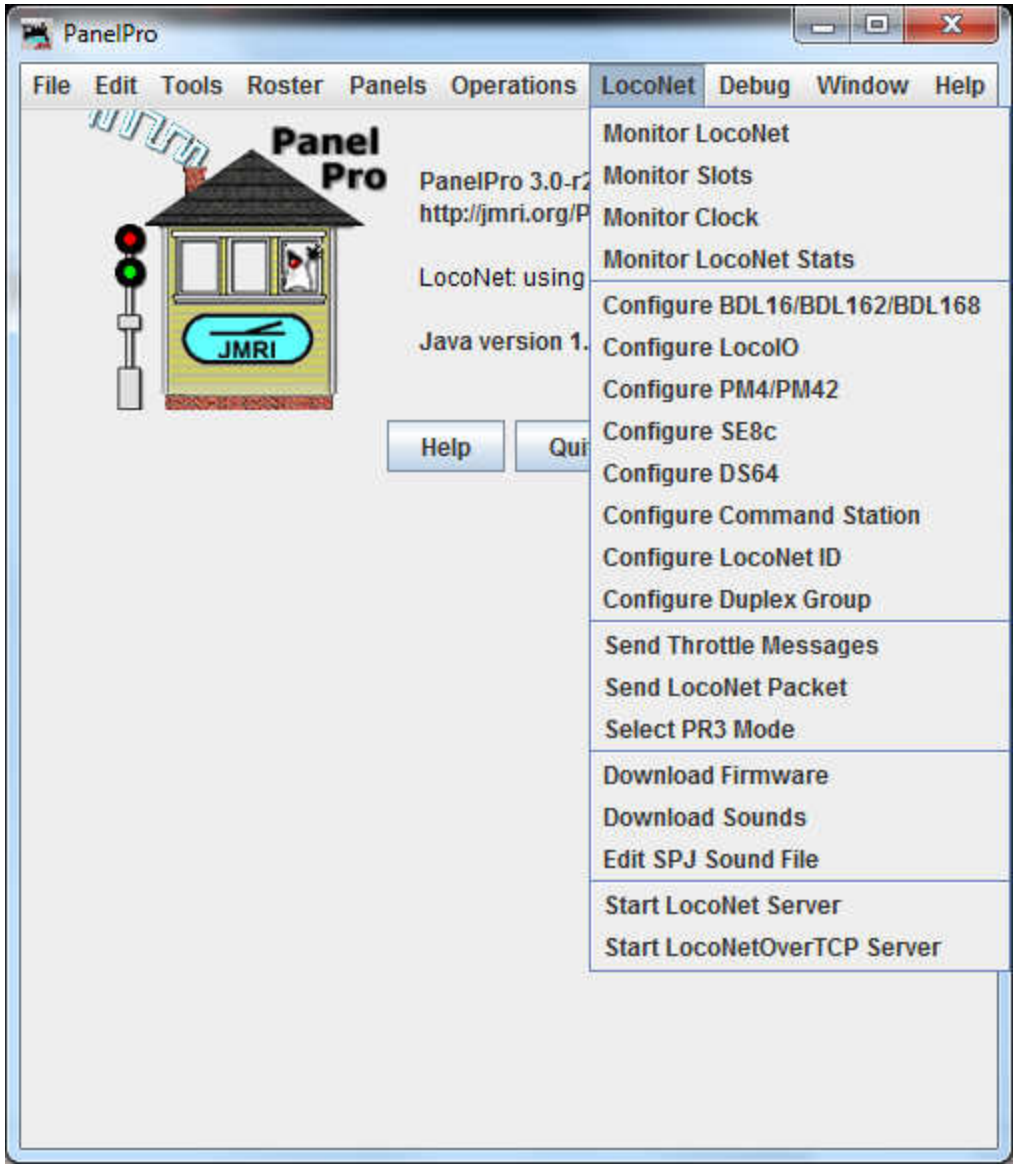


# Examples

- Train Manifests
  - For Train Crew
  - Provides:
    - Locomotive & Caboose Numbers
    - Stops
    - Scheduled time
    - Cars to Pick Up
    - Cars to Set Out
- Switch Lists
  - For Yardmaster
  - Provides:
    - List of trains stopping at location
    - Scheduled time
    - Cars to be picked up
    - Cars to be set out

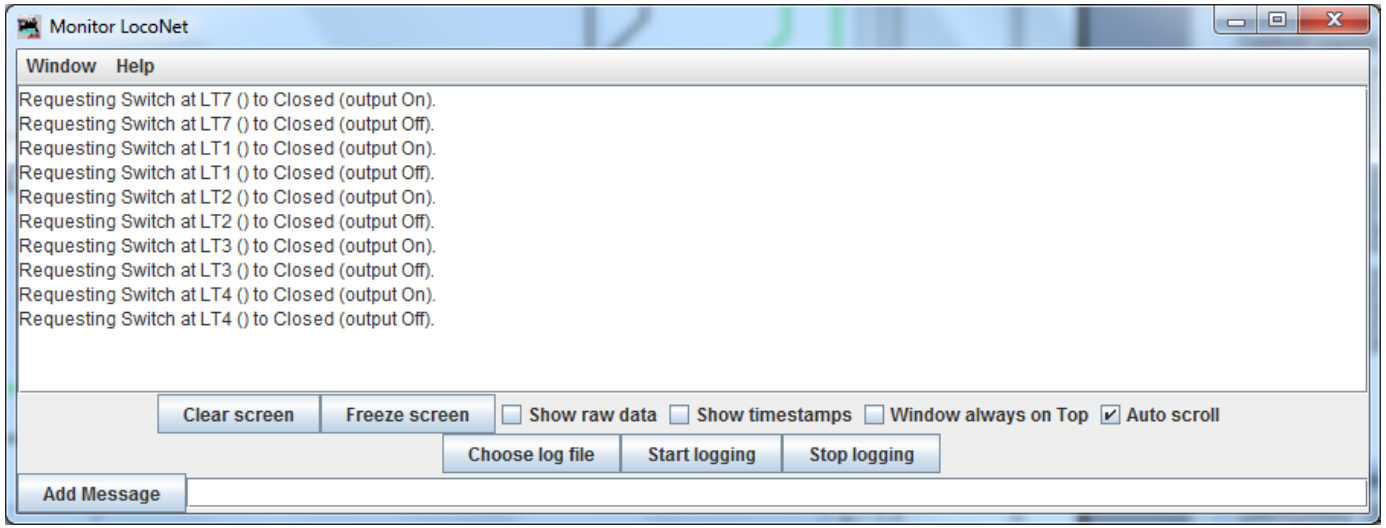
# Loco Net Tools

- 5 Categories of Tools:
  - Monitoring
  - Configuration
  - Send Commands
  - Sound Decoders
  - LocoNet Server
- First Two Most Useful



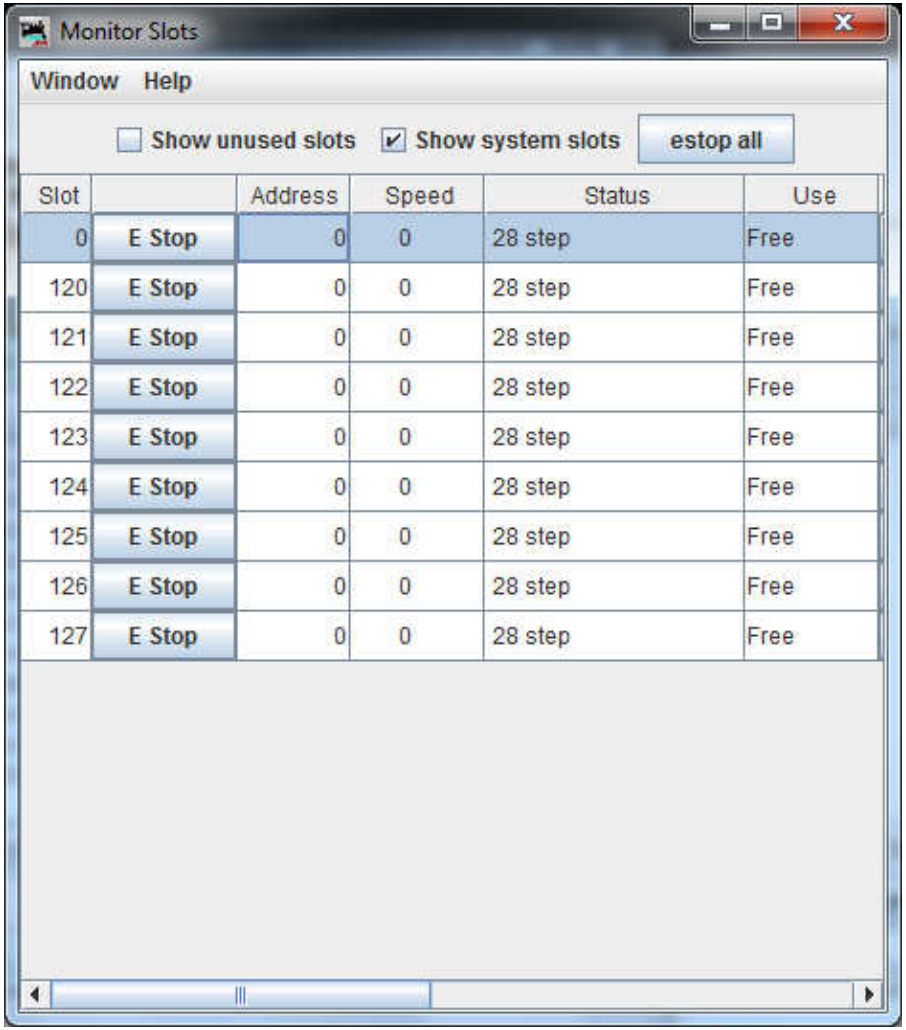
# Monitor LocoNet

- Displays each command sent over LocoNet in plain English
  - Verify LocoBuffer is properly connected & receiving commands
  - Verify component(s) sending commands
  - Verify Automation is working correctly



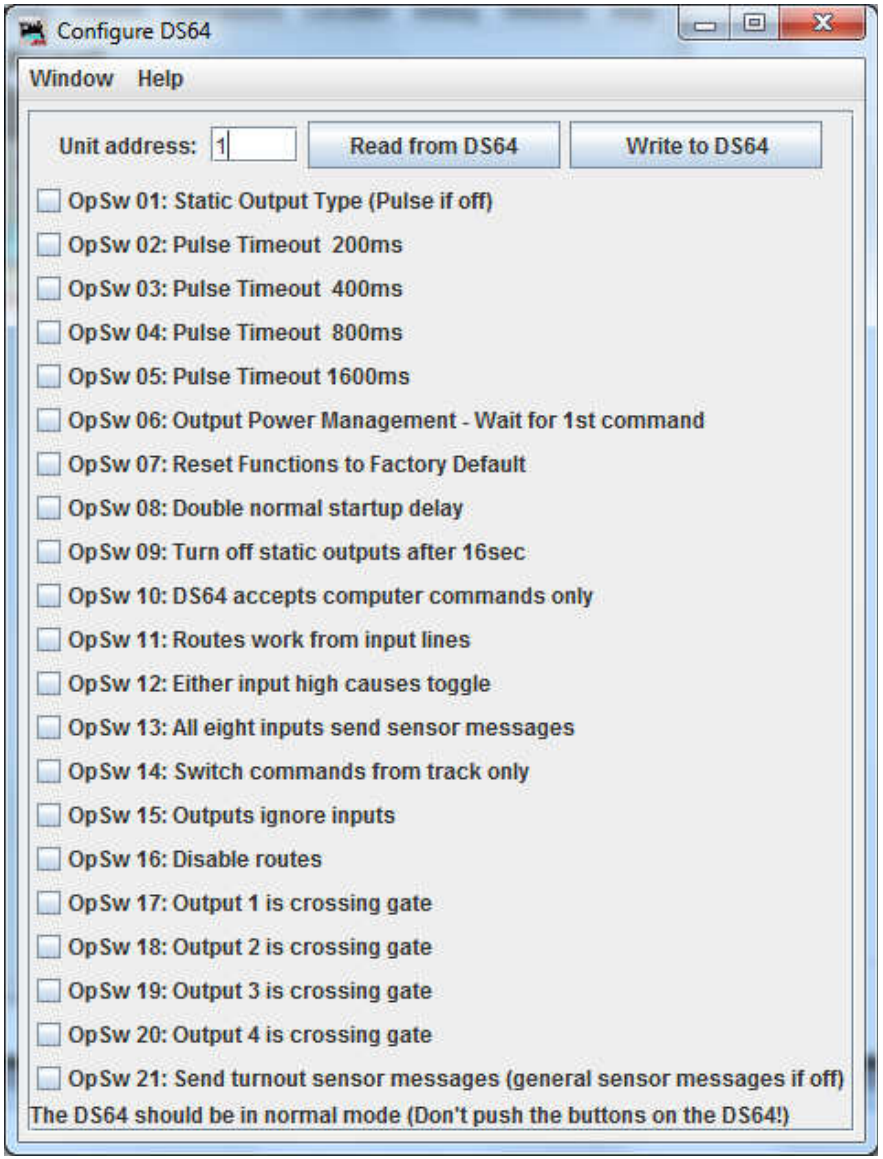
# Monitor Slots

- Command Station slots
  - Locomotive Address
  - Speed Setting
- Provides Emergency Stop (E Stop)
- Provide Means to release slots when full



# Configure Group

- Provides Means for Setting Ops Switches for Components
- DS64 as Example



# Questions

# Back Up

- Requirements for JMRI
  - Hardware
  - Software

# Getting Started

- Hardware
  - Programming Track
  - Command Station
  - Throttle
  - Computer Interface
  - Computer

Can be one unit

- Software
  - JMRI Suite
  - JRE program

Provided on CD-ROM

# Hardware

- Programming Track
  - Isolated
  - Switchable
  - Examples on CD-ROM
- Command Station
  - Readback capability
- Computer Interface
  - System Specific
  - Details on CD-ROM